AGENDA AND MINIBOOK BEGINS ON PAGE 2

INFORMATION REGARDING THE STATE WATER CONTROL BOARD MEETING ON SEPTEMBER 28, 2021

- Radford University requires face masks in indoor spaces regardless of vaccine status.
- Parking Information
  - Link to parking map: https://www.deq.virginia.gov/home/showpublisheddocument/10725/637675494553000000
  - Visitors will need a parking permit for the Board meeting or can park in Lot E or U and shuttle to Kyle Hall.
- Courteous and respectful behavior is expected from everyone here tonight. Disruptive attendees may be asked to leave or, if considered necessary, a recess may be called, or the hearing could be adjourned.
  - Water is permitted, but no outside food or drink can be brought in.
  - Protests, demonstrations, signs and banners are not allowed. Tables may not be set up and written materials by other groups may not be distributed on the property, including all parking areas.
  - No possession or use of any device that may disrupt the conduct of business is permitted, including voice-amplification equipment, bullhorns, blow horns, sirens, or other noise-producing devices.
  - Attendees shall not block or gather in exits, doors or aisles.
  - No tobacco, smoking, e-cigarettes, alcohol, fireworks, pyrotechnics, weapons, or any substance/item controlled by law are permitted. No firearms except for those carried by law-enforcement officers or authorized security personnel are permitted.
  - No animals are allowed except for ADA service animals.
  - Attendees are welcome to record the proceedings; however, you may not interfere with the business of the meeting, nor impede the view or participation of other meeting attendees and staff.

TENTATIVE AGENDA
STATE WATER CONTROL BOARD MEETING

TUESDAY, SEPTEMBER 28, 2021

IN PERSON ONLY - RADFORD UNIVERSITY, KYLE HALL, HOWE STREET, RADFORD VA 24141

Any Updates To Details/Final Arrangements To Be Announced On Virginia Regulatory Town Hall

PERSONS ATTENDING THE MEETING ARE ASKED TO ABIDE BY THE CENTER FOR DISEASE CONTROL COVID-19 GUIDANCE FOR FACE MASKS
(https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/about-face-coverings.html)

Convene – 2:00 P.M.

Agenda Item	Presenter	Tab
Minutes (June 29, 2021)		A
Regulations - Proposed		
• VPDES General Permit Regulation for Vehicle Wash Facilities and Laundry Facilities, 9VAC25-194 -	Davenport	B pg 4
• Water Quality Standards Triennial Review, 9VAC25-260	Thomas	C pg 54
Significant Noncompliance Report and Chesapeake Bay Preservation Act Program Notices of Violations	Severs	D pg 168
Consent Special Orders	Severs	E
• Middle Mile Infrastructure, LLC (In-line Amplifier sites in Campbell, Carroll, Fauquier, Floyd, Franklin Giles, Madison and Nelson Counties) - VPDES Permit Program		pg 170
~~• BleachTech LLC (Petersburg) - VPDES Permit Program~~		~~pg 185~~
• Stephenson Associates, LC (Frederick Co.) - Unpermitted		pg 211
• 6801 Woolridge Road - Moseley LP (Chesterfield Co.) - VWP Permit Program		pg 215
Other Business		
• Future Meetings Dates (December 14)		
• Clean Water Financing and Assistance Program - Program Update	Paylor	F pg 240
• FY2022 Virginia Clean Water Revolving Loan Fund Final Authorizations Southwest Virginia Pilot Program Projects	Paylor	G pg 241
• Mountain Valley Pipeline - Update		
• Division Director's Report	Schneider	
• Public Forum (time not to exceed 45 minutes - no public comment on Mountain Valley Pipeline)		

ADJOURN

NOTE: The Board reserves the right to revise this agenda without notice unless prohibited by law. Revisions to the agenda include, but are not limited to, scheduling changes, additions or deletions. Questions on the latest status of the agenda should be directed to Cindy M. Berndt at (804) 698-4378.

PUBLIC COMMENTS AT STATE WATER CONTROL BOARD MEETINGS: The Board encourages public participation in the performance of its duties and responsibilities. To this end, the Board has adopted public participation procedures for regulatory action and for case decisions. These procedures establish the times for the public to provide appropriate comment to the Board for its consideration.

For REGULATORY ACTIONS (adoption, amendment or repeal of regulations), public participation is governed by the Administrative Process Act and the Board's Public Participation Guidelines. Public comment is accepted during the Notice of Intended Regulatory Action phase (minimum 30-day comment period) and during the Notice of Public Comment Period on Proposed Regulatory Action (minimum 60-day comment period). Notice of these comment periods is announced in the Virginia Register, by posting to the Department of Environmental Quality and Virginia Regulatory Town Hall web sites and by mail to those on the Regulatory Development Mailing List. The comments received during the announced public comment periods are summarized for the Board and considered by the Board when making a decision on the regulatory action.

For CASE DECISIONS (issuance and amendment of permits), the Board adopts public participation procedures in the individual regulations which establish the permit programs. As a general rule, public comment is accepted on a draft permit for a period of 30 days. In some cases a public hearing is held at the conclusion of the public comment period on a draft permit. In other cases there may an additional comment period during which a public hearing is held. In light of these established procedures, the Board accepts public comment on regulatory actions and case decisions, as well as general comments, at Board meetings in accordance with the following:

REGULATORY ACTIONS: Comments on regulatory actions are allowed only when the staff initially presents a regulatory action to the Board for final adoption. At that time, those persons who commented during the public comment period on the proposal are allowed up to 3 minutes to respond to the summary of the comments presented to the Board. Adoption of an emergency regulation is a final adoption for the purposes of this policy. Persons are allowed up to 3 minutes to address the Board on the emergency regulation under consideration.

CASE DECISIONS: Comments on pending case decisions at Board meetings are accepted only when the staff initially presents the pending case decision to the Board for final action. At that time the Board will allow up to 5 minutes for the applicant/owner to make his complete presentation on the pending decision, unless the applicant/owner objects to specific conditions of the decision. In that case, the applicant/owner will be allowed up to 15 minutes to make his complete presentation. The Board will then allow others who commented at the public hearing or during the public comment period up to 3 minutes to exercise their rights to respond to the summary of the prior public comment period presented to the Board. No public comment is allowed on case decisions when a FORMAL HEARING is being held.

POOLING MINUTES: Those persons who commented during the public hearing or public comment period and attend the Board meeting may pool their minutes to allow for a single presentation to the Board that does not exceed the time limitation of 3 minutes times the number of persons pooling minutes, or 15 minutes, whichever is less.

NEW INFORMATION will not be accepted at the meeting. The Board expects comments and information on a regulatory action or pending case decision to be submitted during the established public comment periods. However, the Board recognizes that in rare instances new information may become available after the close of the public comment period. To provide for consideration of and ensure the appropriate review of this new information, persons who commented during the prior public comment period shall submit the new information to the Department of Environmental Quality (Department) staff contact listed below at least 10 days prior to the Board meeting. The Board's decision will be based on the Department-developed official file and discussions at the Board meeting. In the case of a regulatory action, should the Board or Department decide that the new information was not reasonably available during the prior public comment period, is significant to the Board's decision and should be included in the official file, the Department may announce an additional public comment period in order for all interested persons to have an opportunity to participate.

PUBLIC FORUM: The Board schedules a public forum at each regular meeting to provide an opportunity for citizens to address the Board on matters other than those on the agenda, pending regulatory actions or pending case decisions. Those persons wishing to address the Board during this time should indicate their desire on the sign-in cards/sheet and limit their presentations to 3 minutes or less.

The Board reserves the right to alter the time limitations set forth in this policy without notice and to ensure comments presented at the meeting conform to this policy.

Department of Environmental Quality Staff Contact: Cindy M. Berndt, Director, Regulatory Affairs, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, Virginia 23218, phone (804) 698-4378, e-mail: cindy.berndt@deq.virginia.gov.

Additional Meeting Information:

- Attendees are not entitled to be disorderly or disrupt the meeting from proceeding in an orderly, efficient, and effective fashion. Disruptive behavior may result in a recess or removal from the meeting.
- Possession or use of any device that may disrupt the conduct of business is prohibited, including but not limited to: voice-amplification equipment; bullhorns; blow horns; sirens, or other noise-producing devices; as well as signs on sticks, poles or stakes; or helium-filled balloons.
- All attendees are asked to be respectful of all speakers.
- Rules will be enforced fairly and impartially not only to ensure the efficient and effective conduct of business, but also to ensure no interference with the business of the hotel, its employees and guests.
- All violators are subject to removal.

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Matthew J. Strickler
Secretary of Natural and Historic Resources

David K. Paylor
Director
(804) 698-4000

August 23, 2021

MEMORANDUM

TO: Board Members
FROM: Elleanore Daub, Office of VPDES Permits
SUBJECT: VPDES General Permit Regulation for Vehicle Wash Facilities and Laundry Facilities - 9VAC25-194

The current VPDES Vehicle Wash and Laundry General Permit will expire on October 15, 2022 and the regulation establishing this general permit is being amended to reissue another term. The staff is bringing this proposed regulation amendment before the Board to request authorization to hold a public comment period and a public hearing. The proposed regulation takes into consideration the recommendations of a technical advisory committee (TAC) formed for this regulatory action. A list of the TAC membership is attached.

Draft amendments showing proposed changes to the current regulation, the Agency Town Hall background document and the draft Fact Sheet are also attached. Substantive changes to the existing regulation are:

- Section 10 – New definitions added for golf cart equipment, inlet protection measures, lawn maintenance equipment per the request of the TAC. These definitions were added to clarify various requirements in the regulation and to exclude equipment used in fertilizer, pesticide, or herbicide application. Inlet protection measures include containment berms or weighted filters or socks designed to remove metals, oil and grease, solids and debris along with best management practices. Previously, suggestions for inlet protections measures were only in guidance.

- Sections 40 and 70 - Updated the effective dates to January 1, 2023 – December 31, 2027. Since the existing permit expires October 15, 2022, this new date effectively requires the permit to be administratively continued between October 15 and December 31, 2022. This is important so that the permit does not abruptly end before the end of a full year as this causes breaks in discharge monitoring report (DMR) record population for annual and semi-annual required monitoring reports. Moving to a calendar year makes e-DMR population seamless from year to year.

- Section 60 - Registration - Registration statement deadlines changed from 30 days to 60 days prior to expiration of permit, commencement of discharge or adding a new process. Latitude/longitude and State Corporation Commission entity number now required for a complete registration statement. Added that once the 9VAC25-31-1020 (Electronic Reporting) date is established for this industry, registration statements shall be submitted electronically. Three months' notice shall be given by the department about this requirement.

- Section 70 Part I A 1 – Replaced the monitoring requirement with a limit of 5,000 gallons per day (GPD) for vehicle wash facilities that discharge a monthly average flow rate less than or equal to 5,000. This reflects the maximum flow rate allowed by this Part I A limits page. This was discussed in the TAC meeting as a potential addition so it can be tracked more efficiently during the term of the permit.

- Section 70 Part I B 1 Added to the special condition which requires weekly visual monitoring that in addition to recording sheens, floating solids and visible foam, they must also record whether or not there is a discharge.

- Section 70 Part I B 6 – Added to the special condition that requires a solids management plan that this includes solids removed from oil/water separators and cleaning schedule must be in the operation and maintenance manual (O&M). It also now includes trash and other debris handling, storage and disposal.

- Section 70 Part I B 13 - Added to the special condition that requires an O&M manual, the O&M of inlet protection measures. Previously, the O&M manual only addressed the treatment works. Also added that the sludge management plan will include the schedule for settling basin or oil water separator cleaning and solids handling as required by Part I B 6 (solids management plan).

- Section 70 Part II A – Conditions Applicable to All Permits - Added under reporting, that once the 9VAC25-31-1020 (Electronic Reporting) date is established for this industry and 3 months' notice is given, discharge monitoring reports shall be submitted electronically.

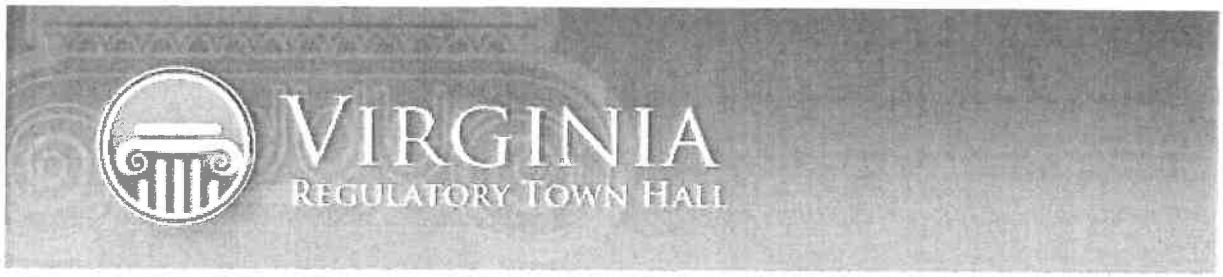
A Notice of Intended Regulatory Action (NOIRA) for the amendment was issued August 3, 2020. No public comments were received.

The Office of the Attorney General will be sent the proposed regulation for certification of statutory authority. The U.S. Environmental Protection Agency will also need to review and approve the general permit prior to final adoption.

Attachments: TAC Membership, Draft General Permit Regulation, Agency Background Document (Town Hall), Draft Fact Sheet

TAC COMMITTEE MEMBERSHIP
VPDES Vehicle Wash and Laundry Facilities General Permit Regulation
9VAC25-194

Mike Ashley President, Mid-Atlantic Carwash Association Owner - Virginia Carwash Industries Inc. and Shenandoah Valley Coin Laundries Inc. PO Box 2 Toms Brook VA 22660 Phone: 540-335-5654 Mobile: 540-975-3354 mhashley@gmail.com	**Diana Handy** Stormwater Specialist Arlington County Department of Environmental Services Office of Sustainability and Environmental Management 2100 Clarendon Blvd, Suite 705 Arlington, VA 22201 703.228.0772 dhandy@arlingtonva.us
Casey Magruder Environmental Program Administrator Department of Public Works - Storm Water 2233 McKann Avenue Norfolk, VA 23509 Email: casey.magruder@norfolk.gov Office: 757-823-4019 | Cell: 757-613-0841 www.norfolk.gov	**Karl Mertig,** CPWD Kimley-Horn | 4500 Main Street, Suite 500 Virginia Beach, VA 23455 Direct: 757 355 6671 | Mobile: 757 715 5729 karl.mertig@kimley-horn.com
DEQ Staff: **Elleanore Daub** - CO VPDES **Allan Brockenbrough** - CO VPDES	**DEQ Staff Technical Liaisons:** Peter Sherman (CO, VPDES Permits) Troy Nipper (CO, Water Compliance) Kevin Harlow (BRRO, VPDES Permits) Anna Tuthill (NRO, MS4 Coordinator/Inspector) Rebecca Johnson (NRO, Water Compliance) Amy Dooley (NRO, Water Compliance) Mark Evans (NRO, Water Compliance) Azra Bilalagic (PRO, VPDES Permits) Nicholas Sturgill (SWRO, Water Compliance).



Exempt Action: Proposed Regulation
Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-194
VAC Chapter title(s)	Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Vehicle Wash Facilities and Laundry Facilities
Action title	Update and amend the regulation that expires on October 15, 2022 in order to continue to offer general permit coverage for this industry.
Date this document prepared	8/13/2021

Although a regulatory action may be exempt from executive branch review pursuant to § 2.2-4002 or § 2.2-4006 of the *Code of Virginia*, the agency is still encouraged to provide information to the public on the Regulatory Town Hall using this form. However, the agency may still be required to comply with the Virginia Register Act, Executive Order 14 (as amended, July 16, 2018), the Regulations for Filing and Publishing Agency Regulations (1VAC7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code.*

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

The regulation specifies requirements for vehicle wash and laundry facilities to discharge process wastewater to protect water quality. The most significant amendments to this regulation are updating definitions, adding 5,000 GPD as a limit, updating operations and maintenance manual requirements.

Mandate and Impetus

Identify the mandate for this regulatory change, and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, internal staff review, petition for rulemaking, periodic review, or board decision). "Mandate" is defined as "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."

The impetus of the regulatory change is Virginia Code § 62.1-44.15 (5a) which states, "All certificates issued by the Board under this chapter shall have fixed terms. The term of a Virginia Pollutant Discharge Elimination System permit shall not exceed five years." This general permit expires on October 15, 2022 and must be reissued in order to make coverage available for seafood processors that discharge to surface waters after that date.

Acronyms and Definitions

Please define all acronyms used in the 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.

DEQ: Department of Environmental Quality
DMR: Discharge Monitoring Report
EPA (U.S. EPA): United States Environmental Protection Agency
GPD: Gallons per Day
MS4: Municipal Separate Storm Sewer System
NAICS: North American Industry Classification System
NPDES: National Pollutant Discharge Elimination System
SCC: State Corporation Commission
SIC: Standard Industrial Classification
TAC: Technical Advisory Committee
USC: United States Code
VAC: Virginia Administrative Code
VPDES: Virginia Pollutant Discharge Elimination System

Legal Basis

Please identify (1) the agency or other promulgating entity, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia or Acts of Assembly chapter number(s), if applicable. Your citation must 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 or promulgating entity's overall regulatory authority.

The promulgating entity is the State Water Control Board. The basis for this regulation is § 62.1-44.2 et seq. of the Code of Virginia. Specifically, § 62.1-44.15(5) authorizes the Board to issue permits for the discharge of treated sewage, industrial wastes or other waste into or adjacent to state waters and § 62.1-44.15(7) authorizes the Board to adopt rules governing the procedures of the Board with respect to the issuance of permits. Further, § 62.1-44.15(10) authorizes the Board to adopt such regulations as it deems necessary to enforce the general water quality management program, §62.1-44.15(14) authorizes the Board to establish requirements for the treatment of sewage, industrial wastes and other wastes, § 62.1-44.16 specifies the Board's authority to regulate discharges of industrial wastes, § 62.1-44.20 provides that agents of the Board may have the right of entry to public or private property for the purpose of obtaining information or conducting necessary surveys or investigations, and § 62.1-44.21 authorizes the Board to require owners to furnish information necessary to determine the effect of the wastes from a discharge on the quality of state waters.

Section 402 of the Clean Water Act (33 USC 1251 et seq.) authorizes states to administer the NPDES permit program under state law. The Commonwealth of Virginia received such authorization in 1975 under the terms of a Memorandum of Understanding with the U.S. EPA. This Memorandum of Understanding was modified on May 20, 1991 to authorize the Commonwealth to administer a General VPDES Permit Program.

Purpose

Please explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it is intended to solve.

This proposed regulatory action is needed in order to establish permitting requirements for discharges from vehicle wash facilities and laundry facilities in order to protect the health, safety and welfare of citizens. The existing general permit expires on October 15, 2022 and must be reissued to cover existing and new vehicle wash and laundry discharges. The goal is to update the permit and the regulation to be consistent with other VPDES general permits.

Substance

Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the "Detail of Changes" section below.

Substantive provisions include adding new definitions for "golf course equipment", "inlet protection measures", "lawn maintenance equipment, "NAICS" and "SIC" and revising definitions of "laundry" and "vehicle wash" in existing section 10. Adding a flow limit of 5,000 gallons per day to the limits page for vehicle wash facilities that discharge a monthly average flow rate less than or equal to 5,000 gallons per day in existing section 70 A. Including oil water separators, trash and other debris in the solids management plan and O&M plan in existing section 70 B 6 (Part I B 6). Adding stormwater inlet protection measure use and maintenance, frequency of settling basin cleaning and solids handling and a schedule for process water sampling attempts to the O&M manual requirement in existing Part I B 13 (section 70). Adding a requirement to submit electronic registration forms and discharge monitoring reports when these are made available by the department in existing sections 60 D and Part II C 2 (section 70).

Issues

Please identify the issues associated with the regulatory change, 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, include a specific statement to that effect.

The advantages to the public and the agency of reissuing this permit are that a VPDES general permit will continue to be available to facilities with eligible discharges enabling them to discharge to surface waters in a manner that is protective of those waters without the increased cost and more complicated application process associated with issuing an individual permit. There are no known disadvantages.

Requirements More Restrictive than Federal

Please identify and describe any requirement of the regulatory change that is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and 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 specific statement to that effect.

There are no requirements that exceed applicable federal requirements.

Agencies, Localities, and Other Entities Particularly Affected

Please identify any other state agencies, localities, or other entities particularly affected by the regulatory change. "Particularly affected" are those that are likely to bear any identified disproportionate material impact, which would not be experienced by other agencies, localities, or entities. "Locality" can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulation or regulatory change are most likely to occur. If no agency, locality, or entity is particularly affected, include a specific statement to that effect.

Other State Agencies Particularly Affected:
None

Localities Particularly Affected:
None

Other Entities Particularly Affected:
None

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) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing 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 regulatory change.

The reissuance of the VPDES general permit accomplishes the objectives of applicable law and minimizes the costs to a small business owner and simplifies the application process. Without the general permit, a small business owner would be required to obtain an individual permit, which would increase the complexity of a permit application and permit costs.

Public Comment Received

Please summarize all comments received during the public comment period following the publication of the NOIRA, and provide the agency response. Ensure to include all comments submitted: including those received on Town Hall, in a public hearing, or submitted directly to the agency or board. If no comment was received, enter a specific statement to that effect.

No comments were received during the Notice of Intended Regulatory Action.

Public Participation

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

In addition to any other comments, the Board is seeking comments on the costs and benefits of the proposal, the potential impacts of this regulatory proposal and any impacts of the regulation on farm and forest land preservation. The agency/board is also 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.

Anyone wishing to submit written comments for the public comment file may do so by mail, email or fax to Elleanore Daub, P.O. Box 1105, Richmond, Virginia 23218, phone: 804-698-4111 (for questions), elleanore.daub@deq.virginia.gov or Fax: 804-698-4178 **(please insure recipient [Elleanore Daub] is on fax or cover page of fax)**.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 be held following the publication of this stage and notice of the hearing will be posted on the Virginia Regulatory Town Hall website (http://www.townhall.virginia.gov) and on the Commonwealth Calendar website (https://commonwealthcalendar.virginia.gov/). Both oral and written comments may be submitted at that time.

Detail of Changes

List all regulatory changes and the consequences of the changes. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. If the regulatory change will be 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 change. Please include citations to the specific section(s) of the regulation that are changing.

11

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-194-10. Definitions.		No definitions exist for "Golf Course Equipment," Inlet Protection Measures," Lawn Maintenance Equipment," "NAICS" and "SIC." Vehicle wash definition excludes only chemical spreading equipment.	Added definitions for "Golf Course Equipment," "Inlet Protection Measures", "Lawn Maintenance Equipment," "NAICS" and "SIC." These definitions were added to clarify various requirements in the regulation. Clarified definition for "Vehicle Wash" to include references to NAICS and SIC codes to be consistent with other VPDES general permit regulations. Clarified that vehicle wash does not include chemical, fertilizer or pesticide spreading equipment. Moved the definition of "Maintenance Equipment" to the definition of "Vehicle Wash" (added street sweepers and catch basin cleaner trucks directly to the list of allowable vehicles) so the phrase "maintenance equipment" would not conflict with the same phrase in the definition of "Lawn Maintenance Equipment." Many of these changes were done as a result of discussion at the TAC meeting on June 10, 2021. The new definitions for "Golf Course Equipment" and "Lawn Maintenance Equipment" may impact some permittees if they are currently getting permit coverage for washing equipment used for fertilizer, pesticide or herbicide application because the new definitions exclude these applications. The definition for "Inlet Protection Measures" may require permittees that rely only on inlet protection to maintain water quality to add additional inlet protection measures since a combination of both equipment and other best management practices are included as part of the definition.
9VAC25-194-15. Applicability of incorporated references based on the dates that they became effective.		Effective date for the Title 40 CFR is July 1, 2017	Effective date for the Title 40 CFR changed to July 1, 2021. No impact.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-194-40. Effective date of the permit.		Effective date of permit is October 16, 2017 – October 15, 2022.	Effective date of permit is January 1, 2023 – December 31, 2026 Updated to cover a new permit term. The effective date is moved to January 1, 2023 which is 2.5 months after the current 5 year term. Ending a permit term in the middle of the month as the permit is currently set up disrupts DMR or e-DMR record population, which is programmed to create DMR records based on full calendar months, quarters and semi-annual or annual time periods. Permit coverage will be administratively continued until January 1, 2023. There is an impact because during the period of administrative continuance (from October 15, 2022 until December 31, 2022, no new permit coverage can be issued. Administrative continuance of permit coverage can only apply to existing permittees. New permittees cannot apply for a permit that is expired.
9VAC25-194-50. Authorization to discharge.		Continuation of permit coverage requires submittal of complete registration statement before October 16, 2017.	Removed the specific date and provide that a complete registration statement must be submitted at least 60 days prior to permit expiration or as specified by the Board. This is being done to all general permit regulations to make the language more generic and avoid having to change dates at every reissuance. No impact.
9VAC25-194-60 A and B. Registration statement.		Registration statement deadlines and required submittals. Deadline 30 days prior expiration of permit, commencement of discharge or adding a new process.	Changed 30 days to 60 days to be consistent with other general permits due dates, and allowed for a later date established by the Board. The impact is that permittees will have to submit a registration statement and other notifications to DEQ sooner. However, the regulation also allows for DEQ to accept a late registration statement but coverage cannot be retroactive.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-194-60 C. Registration statement.		No email, latitude, longitude or SCC requirements.	Various grammar changes. Added email, latitude, longitude and SCC entity identification number. These changes were added to make the registration requirements similar to other general permits. Latitude and longitude were added for e-reporting requirements per EPA. SCC entity identification number added to be clear on the owner's name for permitting and enforcement purposes. Some impact as the registrants will be required to find latitude longitude via a phone application or via the DEQ online VEGIS database. https://www.deq.virginia.gov/connectwithdeq/vegis.aspx Some entities will also be required to obtain an email. Some entities will be required to obtain an SCC entity identification number. Typically, businesses operating in Virginia must already have an SCC entity identification number. This only required if the entity in not a sole proprietor).
9VAC25-194-60 D. Registration statement.		Registration statement shall be delivered to the department by postal or electronic mail.	Added that once the 9VAC25-31-1020 (Electronic Reporting) date is established for this industry, registration statements shall be submitted electronically. Three months' notice shall be given by the department about this requirement. Some impact because once electronic reporting dates are established and technology is developed at the department, the permittees will be required to file registration statements electronically. This may be difficult if the registrant has no available internet access (even via a public library) or computer/internet skills. Waivers are available under very limited circumstances.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-194-70. General permit.		Effective and expiration dates October 16, 2017 – October 15, 2022	Effective date of permit is January 1, 2023 – December 31, 2026 Updated to cover a new permit term. The effective date is moved to January 1, 2023 which is 2.5 months after the current 5 year term. Ending a permit term in the middle of the month as the permit is currently set up disrupts DMR or e-DMR record population, which is programmed to create DMR records based on full calendar months, quarters, semi-annual or annual time periods. Permit coverage will be administratively continued until January 1, 2023. There is an impact because during the period of administrative continuance (from October 15, 2022 until December 31, 2022, no new permit coverage can be issued. Administrative continuance of permit coverage can only apply to existing permittees. New permittees cannot apply for a permit that is expired.
9VAC25-194-70. General permit. Part I A		Flow is a monitoring requirement and the permittee must notify DEQ when flow exceeds this amount.	Added a 5,000 GPD limit for flow to reflect the maximum flow rate allowed by the Part I A limits page. This was discussed in the TAC meeting as a potential addition so it can be tracked more efficiently during the term of the permit. By adding this as a limit instead of a monitoring requirement, some permittees may get a warning letter if the flow exceeds 5,000 GPD.
9VAC25-194-70. General permit. Part I B 1		Special condition includes weekly visual examinations of the effluent including sheens, floating solids, or visible foam.	Presence of a discharge is added to the weekly visual examination. This is done to document to DEQ inspectors whether a "no discharge" result on the annual DMR is accurate. Some impact as another piece of information must be added to the operational log.
9VAC25-194-70. General permit. Part I B 6		Settling basins shall be cleaned frequently to achieve effective treatment and all solids shall be handled, stored, and disposed of so as to prevent a discharge to state waters of such solids.	The special condition now requires that oil water separators, trash and other debris are part of the solids management plan. The schedule for cleaning shall be in the O&M manual. These are clarifications specific to solids management at vehicle washes. Some impact as permittees must add new information to the solids management plan and O&M manual.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-194-70. General permit. Part I B 9		Permittees discharging into a MS4 shall notify the owner of the MS4 of the existence of the discharge at the time of registration and include that notification with the registration statement. The notice shall include the name of the facility, a contact person and contact information, the location of the discharge, the nature of the discharge, and the facility's VPDES general permit number.	Added phone number and email as a detail required under contact information. This was requested by the TAC. Added "if known or existing" under the requirement to provide the facility's VPDES general permit number since new issuances would not have a VPDES general permit number. There may be an impact if a permittee does not have internet access and will be required to obtain that technology in order to provide an email.
9VAC25-194-70. General permit. Part I B 13		The O&M manual requirements include effluent sampling techniques, a discussion of BMPs or stormwater inlet protection methods, treatment system operation, the sludge/solids management plan, procedures for performing the visual examination and a date when the O&M manual was updated.	Clarifying that the O&M manual should contain stormwater inlet protection measures directions for use and maintenance of equipment and should contain (with the sludge/solids management plan) the frequency of cleaning solids from settling basins and oil/water separators. Also, the O&M manual should include the handling of solids from the settling basins or the oil/water separator, trash or other debris such that there is no discharge to state waters. Some impact as permittees must add new information to the O&M manual.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-194-70 Part II C 2			Added that once the 9VAC25-31-1020 (Electronic Reporting) date is established for this industry discharge monitoring reports shall be submitted electronically. Three months' notice shall be given by the department about this requirement. Some impact because once electronic reporting dates are established and technology is developed at the department, the permittees will be required submit discharge monitoring reports electronically. This may be difficult if the registrant has no available internet access (even via a public library) or computer/internet skills. Waivers are available under very limited circumstances.
9VAC25-194-70 Part II I 4		Contains immediate notification requirements for noncompliance which may adversely affect state waters or may endanger public health.	Updated the web site address for electronic immediate notification. No impact.
9VAC25-194-70 Part II I 5		No requirement.	Added a requirement that where the permittee becomes aware that it failed to submit any relevant facts in a permit registration statement or submitted incorrect information in a permit registration statement or in any report to the department, it shall promptly submit such facts or information. This is a requirement in the VPDES permit regulation at 9VAC25-31-190 L 9. Some impact as the permittee needs to be aware of this new requirement.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-194-70 Part II J 1 b		The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit	Removed "elsewhere in this permit" and specified this in Part I B 12. No impact.
9VAC25-194-70 Part II W		The permittee shall allow the director, or an authorized representative, upon presentation of credentials and other documents as may be required by law to enter the property, see records and take samples.	Clarified that the authorized representative includes an authorized contractor acting as a representative of the administrator. This is required by 9VAC25-31-190 I. No impact.
9VAC25-194-70 Part II Y		Permits are not transferable to any person except after notice to the department.	Changed to say that permit coverage is not transferable to any person except after notice to the department. This is because general permits are "covered" under the permit regulation and therefore, permit coverage may be transferred. This paragraph was also renumbered to match the numbering of other general permit regulations. No impact.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please 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 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 potential impact of the proposed regulatory action on the institution of the family and family stability.

Project 6442

State Water Control Board
Amend and Reissue the Existing VPDES General Permit Vehicle Wash Regulation
Chapter 194

VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VPDES) GENERAL PERMIT REGULATION FOR VEHICLE WASH FACILITIES AND LAUNDRY FACILITIES

9VAC25-194-10. Definitions.

The words and terms used in this chapter shall have the meanings defined in the State Water Control Law and 9VAC25-31 (VPDES Permit Regulation) unless the context clearly indicates otherwise, except that for the purposes of this chapter:

"Construction equipment" means trenchers, backhoes, boring equipment, bulldozers, loaders, dump trucks, and any other piece of earth moving equipment.

~~"Department" or "DEQ" means the Department of Environmental Quality.~~

"Golf course equipment" means carts, utility vehicles, bunker rakes, groomers, seeders and other turf equipment but does not mean equipment used in fertilizer, pesticide, or herbicide application.

"Inlet protection measures" means equipment and best management practices to minimize pollution to state waters via the storm drain. Equipment includes containment berms, barriers or seals designed to prevent water from entering the inlet, weighted filters, or socks designed to remove metals, oil and grease, solids and debris combined with other measures including vacuuming of wastewater, shut off hose nozzles, washing or directing wastewater to grassy areas.

"Laundry" means any self-service facility where the washing of clothes is conducted as designated by NAICS Code 812310 and SIC 7215. It does not include facilities that engage in dry cleaning.

"Lawn maintenance equipment" means motorized or hand operated lawn care equipment including mowers, hedgers, aerators, augers, blowers, brush clearers, brush cutters, dethatchers, edgers, pole saws, power rakes and tillers but does not mean equipment used in fertilizer, pesticide, or herbicide application.

~~"Maintenance equipment" means street sweepers and catch basin cleaner trucks.~~

"NAICS" means North American Industry Classification System from the U.S. Office of Management and Budget, 2017 edition.

"SIC" means the Standard Industrial Classification from the U.S. Office of Management and Budget Standard Industrial Classification Manual, 1987 edition.

"Total maximum daily load" or "TMDL" means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges, and load allocations (LAs) for nonpoint sources or natural background or both, and must include a margin of safety (MOS) and account for seasonal variations.

"Vehicle maintenance" means vehicle and equipment rehabilitation, mechanical repairs, painting, fueling, and lubrication.

"Vehicle wash" means any fixed or mobile facility where the manual, automatic, or self-service exterior washing of vehicles is conducted and includes the following:

1. Vehicles that convey passengers or goods on streets or highways ~~as designated by Standard Industrial Classification (SIC) Code 7542~~ such as automobiles, trucks, motor homes, buses, motorcycles, ambulances, fire trucks, and tractor trailers~~;~~. This industry primarily comprises establishments primarily engaged in cleaning, washing, or waxing

automotive vehicles, such as passenger cars, trucks, and vans, and trailers as designated by NAICS Code 811192 and Standard Industrial Classification (SIC) Code 7542;

2. Incidental floor cleaning wash waters associated with facilities that wash vehicles where the floor wash water also passes through the vehicle wash treatment system;

3. Golf course equipment and lawn maintenance equipment;

4. Maintenance and construction equipment; ~~and~~

5. Street sweepers and catch basin cleaner trucks; and

~~5.~~6. Recreational boats less than 8.6' beam and 25' in length towed by a vehicle.

"Vehicle wash" does not mean engine cleaning or degreasing; the cleaning of floors in vehicle maintenance areas, cleaning of the interior of tanks or trailers carrying bulk or raw material, cleaning of equipment used in the paving industry, cleaning of ~~chemical~~chemical, fertilizer or pesticide spreading equipment, or cleaning of tanker trucks, garbage trucks, livestock trailers, trains, boats larger than 8.6' beam and 25' in length, or aircraft; or the use of acid caustic metal brighteners or steam heated water.

9VAC25-194-15. Applicability of incorporated references based on the dates that they became effective.

Except as noted, when a regulation of the U.S. Environmental Protection Agency (EPA) set forth in Title 40 of the Code of Federal Regulations is referenced or adopted in this chapter and incorporated by reference, that regulation shall be as it exists and has been published as of ~~July 1, 2017~~July 1, 2021.

9VAC25-194-20. Purpose.

This general permit regulation governs the discharge of wastewater from vehicle wash facilities and laundry facilities to surface waters.

9VAC25-194-30. Delegation of authority.

The director, or an authorized representative, may perform any act of the board provided under this chapter, except as limited by § 62.1-44.14 of the Code of Virginia.

9VAC25-194-40. Effective date of the permit.

This general permit will become effective on ~~October 16, 2017.~~January 1, 2023. This general permit will expire on ~~October 15, 2022.~~December 31, 2027. This general permit is effective for any covered owner upon compliance with all the provisions of 9VAC25-194-50.

9VAC25-194-50. Authorization to discharge.

A. Any owner governed by this general permit is hereby authorized to discharge wastewater as described in 9VAC25-194-20 to surface waters of the Commonwealth of Virginia provided that:

1. The owner files a registration statement in accordance with 9VAC25-194-60, and that registration statement is accepted by the board;

2. The owner submits the required permit fee;

3. The owner complies with the applicable effluent limitations and other requirements of 9VAC25-194-70; and

4. The owner has not been notified by the board that the discharge is not eligible for coverage under this permit in accordance with subsection B of this section.

B. The board will notify an owner that the discharge is not eligible for coverage under this general permit in the event of any of the following:

1. The owner is required to obtain an individual permit in accordance with 9VAC25-31-170 B 3 of the VPDES Permit Regulation;

2. The owner is proposing to discharge to state waters specifically named in other board regulations that prohibit such discharges;

3. The discharge would violate the antidegradation policy in the Water Quality Standards at 9VAC25-260-30;

4. The discharge is not consistent with the assumptions and requirements of an approved TMDL; or

5. The discharge is to surface waters where there are central wastewater treatment facilities reasonably available, as determined by the board.

C. Mobile vehicle wash owners shall operate such that there is no discharge to surface waters and storm sewers unless they have coverage under this permit.

D. Compliance with this general permit constitutes compliance, for purposes of enforcement, with §§ 301, 302, 306, 307, 318, 403, and 405(a) through (b) of the federal Clean Water Act and the State Water Control Law with the exceptions stated in 9VAC25-31-60 of the VPDES Permit Regulation. Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation.

E. Continuation of permit coverage.

1. ~~Any owner that was authorized to discharge under the car wash facilities general permit issued in 2012, and that submits a complete registration statement on or before October 16, 2017, is authorized to continue to discharge under the terms of the 2012 general permit~~Permit coverage shall expire at the end of the applicable permit term. However, expiring permit coverages are automatically continued if the owner has submitted a complete registration statement at least 60 days prior to the expiration date of the permit or a later submittal date established by the board, which cannot extend beyond the expiration date of the permit. The permittee is authorized to continue to discharge until such time as the board either:

a. Issues coverage to the owner under this general permit; or

b. Notifies the owner that the discharge is not eligible for coverage under this permit.

2. When the owner that was covered under the expiring or expired general permit has violated or is violating the conditions of that permit, the board may choose to do any or all of the following:

a. Initiate enforcement action based upon the ~~2012~~ general permit;coverage that has been continued;

b. Issue a notice of intent to deny coverage under the ~~reissued~~amended general permit. If the general permit coverage is denied, the owner would then be required to cease the discharges authorized by ~~coverage under the 2012~~the continued general permit coverage or be subject to enforcement action for discharging without a permit;

c. Issue an individual permit with appropriate conditions; or

d. Take other actions authorized by the VPDES Permit Regulation (9VAC25-31).

9VAC25-194-60. Registration statement.

A. Deadlines for submitting registration statements. Any owner seeking coverage under this general permit shall submit a complete VPDES general permit registration statement in accordance with this ~~section,~~chapter, which shall serve as a notice of intent for coverage under the ~~general~~ VPDES general permit regulation for vehicle wash facilities and laundry facilities.

1. New facilities. Any owner proposing a new discharge shall submit a complete registration statement at least ~~30~~60 days prior to the date planned for commencement of the ~~discharge.~~discharge or a later submittal established by the board.

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2. Existing facilities.

a. Any owner covered by an individual VPDES permit that is proposing to be covered by this general permit shall submit a complete registration statement at least 240 days prior to the expiration date of the individual VPDES ~~permit.~~permit or a later submittal established by the board.

b. Any owner that was authorized to discharge under ~~the general VPDES permit for vehicle wash facilities (9VAC25-194) that became effective on October 16, 2012,~~an expiring or expired VPDES general permit for vehicle wash facilities and laundry facilities, and that intends to continue coverage under this general permit shall submit a complete registration statement to the board ~~prior to September 15, 2017.~~at least 60 days prior to the expiration date of the existing permit or a later submittal established by the board.

c. Any owner of a vehicle wash facility covered under this permit that had a monthly average flow rate of less than 5,000 gallons per day, and the flow rate increases above a monthly average flow rate of 5,000 gallons per day, shall submit an amended registration statement within ~~30~~60 days of the increased ~~flow.~~flow or a later submittal established by the board.

B. Late registration statements. Registration statements for existing facilities covered under subdivision A 2 b of this section will be accepted after ~~October 15, 2017,~~the expiration date of the permit, but authorization to discharge will not be retroactive. ~~Owners described in subdivision A 2 b of this section that submit registration statements after September 15, 2017, are authorized to discharge under the provisions of 9VAC25-194-50 E if a complete registration statement is submitted before October 16, 2017.~~

C. The required registration statement shall contain the following information:

1. Facility name and mailing address, owner name and mailing address, telephone number, and email address (if available);

2. Facility street address (if different from mailing address);

3. Facility operator (local contact) name, address, telephone number, and email address (if available) if different than owner;

4. ~~Does~~Whether the facility ~~discharge~~discharges to surface ~~waters?~~waters. If "yes," name of receiving stream; if "no," describe the discharge;

5. ~~Does~~Whether the facility ~~discharge~~discharges to a municipal separate storm sewer system ~~(MS4)?~~(MS4). If "yes," the facility owner must provide the name of the MS4 and notify the owner of the municipal separate storm sewer system of the existence of the discharge at the time of registration under this permit and include that notification with the registration statement. The notice shall include the following information: the name of the facility, a contact ~~person and~~person, phone ~~number,~~number, email, the location of the discharge, the nature of the discharge, and the facility's VPDES general permit number;

6. ~~Does~~Whether the facility ~~have~~has a current VPDES ~~Permit?~~permit. If "yes," provide permit number;

7. ~~Does your~~Whether the locality ~~require~~requires connection to central wastewater treatment ~~facilities?~~facilities.

8. ~~Are~~Whether central wastewater treatment facilities are available to serve the ~~site?~~site. If "yes," the option of discharging to the central wastewater facility must be evaluated and the result of that evaluation reported here;

9. A USGS 7.5 minute topographic map or equivalent computer generated map showing the facility discharge ~~location(s)~~locations(s), latitude and longitude and receiving stream;

10. Provide a brief description of the type of washing activity. Include (as applicable) the type of vehicles washed, number of vehicle washing bays, and the number of laundry machines;

11. Highest average monthly flow rate for each washing activity or combined washing activity, reported as gallons per day;

12. Facility line (water balance) drawing;

13. Description of wastewater treatment or stormwater inlet protection measures;

14. Information on use of chemicals at the facility. Include detergents, soaps, waxes, and other chemicals;

15. ~~Will~~Whether detergent used for washing vehicles ~~contain~~contains more than 0.5% phosphorus by ~~weight? and~~weight;

16. State Corporation Commission entity identification number if the facility is required to obtain an entity identuifiation number by law; and

~~16.~~17. The following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

The registration statement shall be signed in accordance with 9VAC25-31-110 of the VPDES Permit Regulation.

D. The registration statement shall be delivered by either postal or electronic mail to the DEQ regional office serving the area where the facility is located. Following notification from the department of the start date for the required electronic submission of Notices of Intent to discharge forms (i.e., registration statements) as provided for in 9VAC25-31-1020, such forms submitted after that date shall be electronically submitted to the department in compliance with this section and 9VAC25-31-1020. There shall be at least three months' notice provided between the notification from the department and the date after which such forms must be submitted electronically.

9VAC25-194-70. General permit.

Any owner whose registration statement is accepted by the board shall comply with the requirements of the general permit and be subject to all requirements of 9VAC25-31-170 of the VPDES Permit Regulation.

General Permit No.: VAG75
Effective Date: ~~October 16, 2017~~January 1, 2023
Expiration Date: ~~October 15, 2022~~December 31, 2027

GENERAL PERMIT FOR VEHICLE WASH FACILITIES AND LAUNDRY FACILITIES AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the State Water Control Law and regulations adopted pursuant thereto, owners of vehicle wash facilities and laundry facilities are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in board regulations which prohibit such discharges.

The authorized discharge shall be in accordance with the information submitted with the registration statement, this cover page, Part I - Effluent Limitations, Monitoring Requirements, ~~and~~ Special Conditions~~,~~ and Part II - Conditions Applicable to All VPDES Permits, as set forth in this general permit.

Part I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.

1. During the period beginning with the permittee's coverage under this general permit and lasting until the permit's expiration date, the permittee is authorized to discharge wastewater originating from vehicle wash facilities that discharge a monthly average flow rate less than or equal to 5,000 gallons per day from outfalls:

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Minimum	Maximum	Frequency[3]	Sample Type
Flow (GPD)	NA	~~NL~~5,000	1/Year	Estimate
pH (S.U.)	6.0[1]	9.0[1]	1/Year	Grab
TSS (mg/l)	NA	60[2]	1/Year	Composite[4]
Oil and Grease (mg/l)	NA	15	1/Year	Grab

NL - No Limitation, monitoring requirement only

NA - Not applicable

[1]Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

[2]Limit given is expressed in two significant figures.

[3]Discharge Monitoring Reports (DMRs) of yearly monitoring (January 1 to December 31) shall be submitted to the DEQ regional office no later than the 10th day of January of each year.

[4]Five grab samples evenly spaced over an eight-hour period or five grab samples evenly spaced for the duration of the discharge if less than eight hours in length.

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Part I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.

2. During the period beginning with the permittee's coverage under this general permit and lasting until the permit's expiration date, the permittee is authorized to discharge wastewater originating from vehicle wash facilities that discharge a monthly average flow rate greater than 5,000 gallons per day from outfalls:

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Minimum	Maximum	Frequency[3]	Sample Type
Flow (GPD)	NA	NL	1/6 Months	Estimate
pH (S.U.)	6.0[1]	9.0[1]	1/6 Months	Grab
TSS (mg/l)	NA	60[2]	1/6 Months	Composite[4]
Oil and Grease (mg/l)	NA	15	1/6 Months	Grab

NL - No Limitation, monitoring requirement only

NA - Not applicable

[1]Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

[2]Limit given is expressed in two significant figures.

[3]Samples shall be collected by December 31 and June 30 of each year and reported on the facility's Discharge Monitoring Report (DMR). DMRs shall be submitted by January 10 and July 10 of each year.

[4]Five grab samples evenly spaced over an eight-hour period or five grab samples evenly spaced for the duration of the discharge if less than eight hours in length.

253 Part I

254 A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.

255 3. During the period beginning with the permittee's coverage under this general permit and
256 lasting until the permit's expiration date, the permittee is authorized to discharge
257 wastewater originating from a laundry facility from outfalls:

258 Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Minimum	Maximum	Frequency[3]	Sample Type
Flow (GPD)	NA	NL	1/Quarter	Estimate
pH (S.U.)	6.0[1]	9.0[1]	1/Quarter	Grab
TSS (mg/l)	NA	60[2]	1/Quarter	Grab
BOD_5 (mg/l)	NA	60[1], [2]	1/Quarter	Grab
Dissolved Oxygen (mg/l)	6.0[1]	NA	1/Quarter	Grab
Temperature °C	NA	32 [1], [4]	1/6 Months	Immersion Stabilization
Total Residual Chlorine (mg/l)	NA	.011[1]	1/Quarter	Grab
E. Coli[5]	NA	235 CFU/100 ml	1/6 Months	Grab
Enterococci[6]	NA	104 CFU/100 ml	1/6 Months	Grab
Fecal Coliform[7]	NA	200 CFU/100 ml	1/6 Months	Grab

NL - No Limitation, monitoring requirement only

NA - Not applicable

CFU – Colony forming units

[1]Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH, BOD_5, DO, TRC and temperature in waters receiving the discharge, those standards shall be, as appropriate, the maximum and minimum effluent limitations.

[2]Limit given is expressed in two significant figures.

[3]Reports of quarterly monitoring shall be submitted to the DEQ regional office no later than the 10th day of April, July, October, and January. Reports of once per six months shall be submitted no later than the 10th day of January and the 10th day of July for samples collected by December 31 and June 30 of each year.

[4]The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, 31°C for mountain and upper piedmont waters, 21°C for put and take trout waters, or 20°C for natural trout waters. For estuarine waters, nontidal coastal and piedmont waters, mountain and upper piedmont waters, and put and take trout waters, the effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. For natural trout waters,

the temperature of the effluent shall not cause an increase of 1°C above natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour, except in the case of natural trout waters where the hourly temperature change shall not exceed 0.5°C.

(5)Applies only when the discharge is into freshwater (see 9VAC25-260-140 C for the classes of waters and boundary designations).

(6)Applies only when the discharge is into saltwater or the transition zone (see 9VAC25-260-140 C for the classes of waters and boundary designations).

(7)Applies only when the discharge is into shellfish waters (see 9VAC25-260-160 for the description of what are shellfish waters).

Part I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.

4. During the period beginning with the permittee's coverage under this general permit and lasting until the permit's expiration date, the permittee is authorized to discharge wastewater originating from a combined vehicle wash and laundry facility from outfalls:

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Minimum	Maximum	Frequency(3)	Sample Type
Flow (GPD)	NA	NL	1/Quarter	Estimate
pH (S.U.)	6.0(1)	9.0(1)	1/Quarter	Grab
TSS (mg/l)	NA	60(2)	1/Quarter	5G/8HC
BOD_5 (mg/l)	NA	60(1), (2)	1/Quarter	Grab
Oil and Grease	NA	15	1/6 Months	Grab
Dissolved Oxygen (mg/l)	6.0(1)	NA	1/Quarter	Grab
Temperature °C	NA	32 (1), (4)	1/6 Months	Immersion Stabilization
Total Residual Chlorine (mg/l)	NA	.011(1)	1/Quarter	Grab
E. Coli(5)	NA	235 CFU/100 ml	1/6 Months	Grab
Enterococci(6)	NA	104 CFU/100 ml	1/6 Months	Grab
Fecal Coliform(7)	NA	200 CFU/100 ml	1/6 Months	Grab

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NL - No Limitation, monitoring requirement only

NA - Not applicable

CFU – Colony forming units

(1)Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH, BOD_5, DO, TRC and temperature in waters receiving the discharge, those standards shall be, as appropriate, the maximum and minimum effluent limitations.

(2)Limit given is expressed in two significant figures.

(3)Reports of quarterly monitoring shall be submitted to the DEQ regional office no later than the 10th day of April, July, October, and January. Reports of once per six months shall be submitted no later than the 10th day of January and the 10th day of July for samples collected by December 31 and June 30 of each year.

(4)The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, 31°C for mountain and upper piedmont waters, 21°C for put and take trout waters, or 20°C for natural trout waters. For estuarine waters, nontidal coastal and piedmont waters, mountain and upper piedmont waters, and put and take trout waters, the effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. For natural trout waters, the temperature of the effluent shall not cause an increase of 1°C above natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour, except in the case of natural trout waters where the hourly temperature change shall not exceed 0.5°C.

(5)Applies only when the discharge is into freshwater (see 9VAC25-260-140 C for the classes of waters and boundary designations).

(6)Applies only when the discharge is into saltwater or the transition zone (see 9VAC25-260-140 C for the classes of waters and boundary designations).

(7)Applies only when the discharge is into shellfish waters (see 9VAC25-260-160 for the description of what are shellfish waters).

B. Special conditions.

1. The permittee of a vehicle wash facility shall perform visual examinations of the effluent including sheens, floating solids, or visible foam and maintenance of the wastewater treatment facilities and inlet protection measures, if applicable, at least once per week and document this visual examination and maintenance activities in the operational log. This operational log shall include the examination date and time, examination personnel, presence of a discharge and the visual quality of the ~~discharge and~~discharge. The operational log shall be made available for review by the department personnel upon request.

2. The effluent shall be free of sheens. There shall be no discharge of floating solids or visible foam in other than trace amounts.

3. No sewage shall be discharged from a point source to surface waters from this facility except under the provisions of another VPDES permit specifically issued for that purpose.

4. There shall be no chemicals added to the water or waste which may be discharged other than those listed on the owner's accepted registration statement, unless prior approval of the chemical is granted by the board.

5. Wastewater should be reused or recycled whenever feasible.

6. The permittee of a vehicle wash facility shall comply with the following solids management ~~plan:~~plan, where applicable:

a. ~~All~~Any settling basins or oil water separators shall be cleaned ~~frequently in order~~in accordance with the schedule outlined in the O&M manual and at a frequent enough interval to achieve effective treatment.

b. ~~All~~Any solids from settling basins, oil water separators, trash or other debris shall be handled, stored, and disposed of so as to prevent a discharge to state waters of such solids.

7. Washing of vehicles or containers bearing residue of animal manure or toxic chemicals (fertilizers, organic chemicals, etc.) is prohibited. If the facility is a self-service operation, the permittee shall post this prohibition on a sign prominently located and of sufficient size to be easily read by all patrons.

8. If the facility has a vehicle wash discharge with a monthly average flow rate of less than 5,000 gallons per day, and the flow rate increases above a monthly average flow rate of 5,000 gallons per day, an amended registration statement shall be filed within 30 days of the increased flow.

9. A permittee submitting a registration statement in accordance with Part II M and discharging into a municipal separate storm sewer shall notify the owner of the municipal separate storm sewer system of the existence of the discharge at the time of registration under this permit and include that notification with the registration statement. The notice shall include the following information: the name of the facility, a contact person and contact ~~information,~~information (phone number and email), the location of the discharge, the nature of the discharge, and the facility's VPDES general permit ~~number.~~number, if known or existing.

10. Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other federal, state, or local statute, ordinance, or regulation.

11. The owner of a facility discharging vehicle wash water directly to a stormwater drain shall provide inlet protection measures in addition to meeting all other requirements of the permit.

12. The permittee shall notify the department as soon as the permittee knows or has reason to believe:

a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter of the toxic pollutant;

(2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;

(3) Five times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the board.

b. That any activity has occurred or will occur that would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant that is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(1) Five hundred micrograms per liter of the toxic pollutant;

(2) One milligram per liter for antimony;

(3) Ten times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the board.

13. Operation and maintenance manual requirement. The permittee shall develop and maintain an accurate operation and maintenance (O&M) manual for the wastewater treatment works and applicable inlet protection ~~measures, if applicable.~~measures. This manual shall detail the practices and procedures that will be followed to ensure compliance with the requirements of this permit. The permittee shall operate and maintain the treatment works and the inlet protection measures in accordance with the O&M manual. The O&M manual shall be reviewed and updated at least annually and shall be signed and certified in accordance with Part II K of this permit. The O&M manual shall be made available for review by the department personnel upon request. The O&M manual shall include, but not necessarily be limited to, the following items, as appropriate:

a. Techniques to be employed in the collection, preservation, and analysis of effluent samples;

b. ~~Discussion of best management practices or stormwater inlet protection methods;~~Stormwater inlet protection measure directions for use and maintenance of equipment;

c. Best management practices employed;

~~c.~~d. Treatment system operation, routine preventive maintenance of units within the treatment system, critical spare parts inventory, and recordkeeping;

~~d.~~e. A sludge/solids management plan including the schedule for settling basin or oil water separator cleaning and solids handling as required by Part I B 6;

~~e.~~f. Procedures for performing the visual examination and maintenance required by Part I B 1 including example log sheets and the location of the operational log; and

~~f.~~g. Date when the O&M manual was updated or reviewed and any changes that were made.

14. Compliance reporting under Part I A 1 through 4.

a. The quantification levels (QL) shall be as follows:

Effluent Characteristic	Quantification Level
BOD_5	2 mg/l
TSS	1.0 mg/l
Oil and Grease	5.0 mg/l
Chlorine	0.10 mg/l

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the test method.

b. Reporting. Any single datum required shall be reported as "<QL" if it is less than the QL in subdivision 14 a of this subsection. Otherwise, the numerical value shall be reported. The QL must be less than or equal to the QL in subdivision 14 a of this subsection.

c. Monitoring results shall be reported using the same number of significant digits as listed in the permit. Regardless of the rounding convention used by the permittee (e.g., five always rounding up or to the nearest even number), the permittee shall use the convention consistently and shall ensure that consulting laboratories employed by the permittee use the same convention.

15. The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards in 9VAC25-260.

16. Discharges to waters with an approved total maximum daily load (TMDL). Owners of facilities that are a source of the specified pollutant of concern to waters where an approved TMDL has been established shall implement measures and controls that are consistent with the assumptions and requirements of the TMDL.

17. Notice of termination.

a. The owner may terminate coverage under this general permit by filing a complete notice of termination with the department. The notice of termination may be filed after one or more of the following conditions have been met:

(1) Operations have ceased at the facility and there are no longer wastewater discharges from vehicle wash or laundry activities from the facility;

(2) A new owner has assumed responsibility for the facility. A notice of termination does not have to be submitted if a VPDES Change of Ownership Agreement form has been submitted;

(3) All discharges associated with this facility have been covered by a VPDES individual permit or an alternative VPDES permit; or

(4) Termination of coverage is requested for another reason provided the board agrees that coverage under this general permit is no longer needed.

b. The notice of termination shall contain the following information:

(1) Owner's name, mailing address, telephone number, and email address (if available);

(2) Facility name and location;

(3) VPDES vehicle wash facilities and laundry facilities general permit number; and

(4) The basis for submitting the notice of termination, including:

(a) A statement indicating that a new owner has assumed responsibility for the facility;

(b) A statement indicating that operations have ceased at the facility and there are no longer wastewater discharges from vehicle wash or laundry activities from the facility;

(c) A statement indicating that all wastewater discharges from vehicle wash facilities and laundry facilities have been covered by an individual VPDES permit; or

(d) A statement indicating that termination of coverage is being requested for another reason (state the reason).

c. The following certification:

"I certify under penalty of law that all wastewater discharges from vehicle wash or laundry facilities from the identified facility that are authorized by this VPDES general permit have been eliminated, or covered under a VPDES individual or alternative permit, or that I am no longer the owner of the industrial activity, or permit coverage should be terminated for another reason listed above. I understand that by submitting this notice of termination, that I am no longer authorized to discharge wastewater from vehicle wash facilities or laundry facilities in accordance with the general permit, and that discharging pollutants in wastewater from vehicle wash facilities or laundry facilities to surface waters is unlawful where the discharge is not authorized by a VPDES permit. I also understand that the submittal of this notice of termination does not release an owner from liability for any violations of this permit or the Clean Water Act."

d. The notice of termination shall be signed in accordance with Part II K.

e. The notice of termination shall be submitted to the DEQ regional office serving the area where the vehicle wash or laundry facility is located.

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Part II
CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.

2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency unless other procedures have been specified in this permit.

3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

4. Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records.

1. Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;

b. The individuals who performed the sampling or measurements;

c. The dates and times analyses were performed;

d. The individuals who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the registration statement for this permit, for a period of at least three years from the date of the sample, measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the board.

C. Reporting monitoring results.

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the department's regional office.

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the department. Following notification from the department of the start date for the required electronic submission of monitoring reports, as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall be electronically submitted to the department in compliance with this section and 9VAC25-31-1020. There shall be at least three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.

4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to provide information. The permittee shall furnish to the department, within a reasonable time, any information which the board may request to determine whether cause exists for terminating coverage under this permit or to determine compliance with this permit. The board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from ~~his~~the pemittee's discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the department upon request, copies of records required to be kept by this permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized discharges. Except in compliance with this permit or another permit issued by the board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or

2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of unauthorized discharges. Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F, or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F, shall notify the department of the discharge immediately (see Part II I 4) upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;

2. The cause of the discharge;

3. The date on which the discharge occurred;

4. The length of time that the discharge continued;

5. The volume of the discharge;

6. If the discharge is continuing, how long it is expected to continue;

7. If the discharge is continuing, what the expected total volume of the discharge will be; and

8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly ~~notify,~~(notify (see Part II I 4), in no case later than 24 hours, the department ~~by telephone~~ after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse effects on aquatic life and the known number of fish killed. The permittee shall submit the report to the department in writing within five days of discovery of the discharge in accordance with Part II I 2. Unusual and extraordinary discharges include any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;

2. Breakdown of processing or accessory equipment;

3. Failure or taking out of service some or all of the treatment works; and

4. Flooding or other acts of nature.

I. Reports of noncompliance. The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this subsection:

a. Any unanticipated bypass; and

b. Any upset which causes a discharge to surface waters.

2. A written report shall be submitted within five days and shall contain:

a. A description of the noncompliance and its cause;

b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and

c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The board may waive the written report on a case-by-case basis for reports of noncompliance under Part II I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 2.

~~NOTE:~~4. The immediate (within 24 hours) reports required in Part II G, H and I may be made to the department's regional office. Reports may be made by telephone, FAX, or online at ~~http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx.~~https://www.deq.virginia.gov/get-involved/pollution-response. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Management maintains a 24-hour telephone service at 1-800-468-8892.

5. Where the permittee becomes aware that it failed to submit any relevant facts in a permit registration statement or in any report to the department, it shall promptly submit such facts or information.

J. Notice of planned changes.

1. The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

(1) After promulgation of standards of performance under § 306 of the Clean Water Act which are applicable to such source; or

(2) After proposal of standards of performance in accordance with § 306 of the Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with § 306 within 120 days of their proposal;

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified ~~elsewhere in this permit;~~in Part I B 12; or

c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit registration process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory requirements.

1. Registration statement. All registration statements shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit registration requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reporting requirements. All reports required by permits and other information requested by the board shall be signed by a person described in Part II K 1 or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part II K 1;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant

manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and

c. The written authorization is submitted to the department.

3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the department prior to or together with any reports or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Part II K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to comply. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action, for permit coverage termination, or for denial of a permit coverage renewal application.

The permittee shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants ~~and with standards for sewage sludge use or disposal established under § 405(d) of the Clean Water Act~~ within the time provided in the regulations that establish these standards or ~~prohibitions or standards for sewage sludge use or disposal,~~prohibitions, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall submit a new registration statement at least ~~30~~60 days before the expiration date of the existing permit, unless permission for a later date has been granted by the board. The board shall not grant permission for registration statements to be submitted later than the expiration date of the existing permit.

N. Effect of a permit. This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State law. Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by § 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U) and "upset" (Part II V), nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and hazardous substance liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or

penalties to which the permittee is or may be subject under Article 11 (§ 62.1-44.34:14 et seq.) of the State Water Control Law.

Q. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of solids or sludges. Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass.

1. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part II U 2 and U 3.

2. Notice.

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible, at least 10 days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.

3. Prohibition of bypass.

a. Bypass is prohibited, and the board may take enforcement action against a permittee for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under Part II U 2.

b. The board may approve an anticipated bypass, after considering its adverse effects, if the board determines that it will meet the three conditions listed in Part II U 3 a.

V. Upset.

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was

caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the permittee can identify the causes of the upset;

b. The permitted facility was at the time being properly operated;

c. The permittee submitted notice of the upset as required in Part II I; and

d. The permittee complied with any remedial measures required under Part II S.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and entry. The permittee shall allow the director, or an authorized ~~representative,~~representative (including an authorized contractor acting as a representative of the administrator), upon presentation of credentials and other documents as may be required by law to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit actions. Permit coverage may be terminated for cause. The filing of a request by the permittee for a permit coverage termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permit coverage. ~~Permits are~~

1. Permit coverage is not transferable to any person except after notice to the department.

2. Coverage under this permit may be automatically transferred to a new permittee if:

~~1.~~a. The current permittee notifies the department within 30 days of the transfer of the title to the facility or property;

~~2.~~b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

~~3.~~c. The board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2.

Z. Severability. The provisions of this permit are severable, and, if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

FORMS

Registration Statement for the General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Vehicle Wash Facilities and Laundry Facilities 2012 Reissuance (rev. 8/14)

Documents Incorporated By Reference

DOCUMENTS INCORPORATED BY REFERENCE (9VAC25-194)

Standard Industrial Classification Manual 1987, U.S. Office of Management and Budget, National Technical Information Service, Order No. PB 87-100012.

pages 42 - 53 - fact sheet

contact Eleanore Daub

Commonwealth of Virginia

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MEMORANDUM

TO: **State Water Control Board**

FROM: Jutta Schneider, Water Planning Division Director

SUBJECT: **Request to Proceed to Public Hearing and Comment on Proposed Amendments to the Water Quality Standards — Triennial Review**

DATE: September 4, 2021

EXECUTIVE SUMMARY

Staff intends to ask the Board for approval to go to public hearing and comment on amendments to the Water Quality Standards regulation (State Water Control Board, 9 VAC 25-260 Virginia Water Quality Standards, Triennial Review Proposed Amendments; attached). The Board has a legal mandate for a review of the Water Quality Standards (WQS) under the Code of Virginia (§62.1- 44.15(3a)) and federal regulation at 40 CFR 131, at least once every three years. During this review the Board must adopt, modify or cancel standards as appropriate. This rulemaking is needed because new scientific information is available to update the water quality standards and changes are needed to improve permitting, monitoring and assessment programs. The goal is to provide the citizens of the Commonwealth with a technical regulation that is protective of water quality in surface waters, reflects recent scientific information, reflects agency procedures and is reasonable and practical. An ad hoc Regulatory Advisory Panel (RAP) advised staff on development of the proposed amendments. An overview of the proposed changes is presented below and discussed in more detail in subsequent sections of this memorandum:

- Update the table of numerical criteria in 9VAC25-260-140 to include new aluminum criteria to protect aquatic life, updating the approach for using the EPA recommended biotic ligand model (BLM) for freshwater copper criteria, updating the human health criteria for 10 toxic pollutants (for both public water supplies and other surface waters), and updating the Chemical Abstract Number (CAS) for five (5) constituents.

- Update the Submerged Aquatic Vegetation Acres and Water Clarity Acres used to determine attainment of the shallow water submerged aquatic vegetation designated use in five (5) Chesapeake Bay Program Segments in 9VAC25-260-185.B.
- Addition of a new reservoir in the list of lakes subject to the nutrient criteria in 9VAC25-260-187.
- Update the 9VAC25-260-310. *Special standards and requirements* to remove special standard "y", superseded by the new ammonia criteria, and add special standard "ii" incorporating criteria to protect the recreation use in the North Fork, South Fork and mainstem Shenandoah Rivers from persistent nuisance filamentous algae.
- Miscellaneous updates to the special standards for specific river basins and subbasins in sections 9VAC25-260-390 through 9VAC25-260-500.

BACKGROUND

A Notice of Intended Regulatory Action (NOIRA) was published March 1, 2021. The NOIRA is available at: https://townhall.virginia.gov/l/ViewAction.cfm?actionid=5637. A public comment period was held between March 1 and March 31, 2021. Comments were received from several organizations and individuals; a summary of the public comments received are provided as Attachment 1 of the Agency Background Document for the Proposed Regulation (which is provided as Attachment 3 of this memo). An ad hoc Regulatory Advisory Panel (RAP) consisting of 16 members was formed and four meetings were held (May 18, June 2, June 16, and June 30, 2021). The RAP members and the organization represented by each member are presented as Attachment 1 of this memo. The meeting minutes from each of the four RAP meetings may be accessed online at: https://townhall.virginia.gov/L/meetings.cfm

PROPOSED 2021 TRIENNIAL REVIEW AMENDMENTS

The following discussion summarizes the key sections of the regulation proposed for amendment and provides background on the basis for the proposed updates. A summary table providing further details on the specific changes proposed for amendment with this rulemaking is provided in Attachment 2 of this memo. Additional details on the background, legal authority, purpose, impacts, issues and public comments associated with the proposed regulation is contained in the Agency Background Document which is included as Attachment 3 of this memo.

1. Table of Parameters § 9 VAC 25-260-140

The Table of Parameters contains a list of toxic chemicals and the water quality criteria designed to protect human health and aquatic life. The criteria are expressed as concentrations in parts per billion (micrograms/liter). Triennial Review is the appropriate time to update the Table based on new technical information available on the toxicity of these parameters to human health and aquatic life.

a) **Criteria to Protect Human Health; 20 Revised Parameters** – Twenty human health criteria for 10 pollutants have been recalculated using updated exposure factor recommendations provided by the U.S. Environmental Protection Agency (EPA). The

revised criteria concentrations for antimony, 2,3,7,8-tetrachlorodibenzo-p-dioxin, nickel, n-nitrosodimethylamine, n-nitrosodiphenylamine, n-nitrosodi-n-propylamine, total PCBs, selenium, thallium, and zinc are between 5% and 67% lower than their existing criteria. These changes could have an economic impact on permittees if these particular pollutants are present in their effluent.

b) **Removal of a Human Health Parameter**— The removal of the parameter bis(chloromethyl) ether from the Table of Parameters is being proposed due to the 38 second half-life of this pollutant and the fact that EPA no longer considers it to be a Priority Pollutant. This change is not expected to have an economic impact on permittees that have human health pollutants in their effluent.

c) **Footnote for Human Health Criteria**— The existing Table of Parameters does not contain language specifying the duration of human health criteria. The following language is proposed as a footnote to this section: "Human health criteria are based on the assumption of average amount of exposure on a long-term basis." This change is not expected to have an economic impact on permittees that have this pollutant in their effluent.

d) **Freshwater Aluminum Criteria for the Protection of Aquatic Life**--EPA has issued new criteria recommendations for aluminum for the protection of aquatic life. Virginia does not currently have criteria for this metal. This change could have an economic impact on permittees if aluminum is present in their effluent.

e) **Modification to Freshwater Copper Criteria**—The existing regulation provides two options for deriving freshwater copper criteria: the Biotic Ligand Model (BLM) and hardness-based equations. Language is being proposed for this section which stipulates that the BLM should be used when a sufficient dataset of model input parameters is available. This change could have an economic impact on permittees if copper is present in their effluent.

2. Chesapeake Bay Aquatic Life Criteria §9 VAC 25-260-185

This section lists criteria that protect designated uses from the impacts of nutrients and suspended sediment in the Chesapeake Bay and its tidal tributaries. Biocriteria in the form of submerged aquatic vegetation (SAV) acres were adopted by the Board for the Bay segments in 2005. The primary basis of these criteria were restoration targets developed by SAV researchers at the Virginia Institute for Marine Science working in conjunction with the Chesapeake Bay Program Partnership. A recent analysis conducted by the Chesapeake Bay Program Partnership found that the acreages adopted for five segments are substantially lower than the restoration targets the SAV experts recommended for them. The regulatory proposal addresses this discrepancy by increasing the SAV criteria for these segments so they are consistent with the reasoning underlying the other SAV criteria. Corresponding water clarity acres for the five segments have also been increased. These changes are not expected to have an economic impact on permittees.

3. Criteria for man-man lakes and reservoirs §9 VAC 25-260-187
This section lists criteria that protect aquatic life and recreational designated uses for man-made lakes and reservoirs of a certain size and significance. DEQ staff recommend that Lake Mooney in Stafford County be added to this section due to its proposed PWS designation. These changes are not expected to have an economic impact on permittees.

4. Special standards and requirements §9 VAC 25-260-310
A description of all site-specific criteria and the waters they apply to are provided in this section.

a) **Numeric Filamentous Algae Criteria**—During the public comment periods for the 2012 and subsequent Integrated Reports, DEQ received comments from citizens regarding the presence of algae in the Shenandoah River and concern that the algae in the river impaired the recreation designated use. In response to citizen comments, DEQ identified five segments (approximately 25 river miles) along the North Fork and South Forks of the Shenandoah River as having an observed effect but lacking sufficient data to assess the attainment status of the recreation use. DEQ monitored these segments over the 2016 to 2019 period, developing and testing scientifically-based, defensible, and reproducible field methods for quantifying filamentous algae growth using benthic chlorophyll-a. DEQ staff also researched thresholds by other states for the purposes of determining when filamentous algae growth has reached a nuisance condition in freshwater streams. The result of this multi-year effort is a proposed special standard for benthic chlorophyll-a designed to limit persistent, nuisance filamentous algae growth in large sections of the mainsteam North Fork Shenandoah, South Fork Shenandoah, and Shenandoah Rivers. The proposed amendments provide two-month median and seasonal median criteria for benthic chlorophyll-a, both of which would apply during the recreation season (May 1 through October 31). As proposed, the waters for which these criteria would apply cannot exceed criteria more than once in three years in order to ensure attainment of the recreation use. This proposed special standard may have an economic impact on permittees.

b) **Removal of Special Standard y**—The ammonia criteria adopted by the Board in 2019 stipulates that mussels are present unless the absence of mussels has been adequately demonstrated. This provision contravenes the existing special standard y, which provides a chronic ammonia criterion applicable to the tidal fresh Potomac embayments and its tributaries to the fall line. This ammonia criterion does not consider the presence of mussels, which are very sensitive to ammonia. This special standard is being proposed for removal. This change could have an economic impact on permittees.

The proposed Water Quality Standards regulation (9 VAC 25-260) incorporating the 2021 Triennial Review amendments is provided as Attachment 4.

ADDITIONAL COMMENTS AND ISSUES

Several other issues were suggested for consideration by commenters and/or RAP members during either the NOIRA public comment period or RAP meetings, and were discussed with the RAP. However, where noted, DEQ staff does not believe revisions to the regulation with respect to these issues are warranted at this time.

Criteria to Protect Human Health; Per- and Polyfluoroalkyl Substances (PFAS/PFOA)

The science of PFAS/PFOA is still emerging. EPA is currently developing water quality criteria for these substances but has not yet issued nationally recommended regulatory thresholds. At the third RAP meeting, Mr. Jeffrey Steers (Director of Central Operations) delivered a presentation describing Virginia's efforts to address PFAS/PFOA. The Virginia PFAS Workgroup, for which Mr. Steers is a member, is conducting research that may lead to recommended maximum contaminant levels for inclusion in the regulations of the Board of Health.

Criteria to Protect Primary Contact Recreation; Cyanotoxins

In 2019, EPA recommended thresholds designed to protect primay contact recreators (swimmers and bathers) from the harmful effects of cyanotoxins. Cyanotoxins are toxins produced by cyanobacteria, a kind of algae that can produce harmful algae blooms (HABs) in lakes/reservoirs and other slow-moving water bodies. States have the discretion to adopt the recommended thresholds as swimming advisory levels or as water quality criteria. DEQ staff believe that water quality assessments regarding HABs should rest on swimming advisories issued by the Department of Health (VDH). VDH may use the EPA thresholds for the basis of their advisories, but may also base advisories on other lines of evidence, such as cyanobacterial cell counts.

Cultural and Tribal Designated Uses

A RAP member requested information pertaining to the process for designating waters for uses specific to tribal cultural practices. DEQ staff provided the RAP with examples of such uses from California and New Mexico. The discussion also included whether additional consideration had been given to using any human health criteria exposure factors besides the 2011 EPA recommendations. Although not part of this proposed rulemaking, DEQ plans to engage the Virginia Tribes and continue these discussions at a later date.

Review of Mixing Zone Policy

In response to comments received about the agency's mixing zone policy, Ms. Melanie Davenport (Director of Water Permitting) presented to the RAP an overview of an agency initiative identified pursuant to the Governor's Executive Order 6. Ms. Davenport stated that under this initiative, DEQ will re-examine how it implements mixing zones for discharges containing toxic pollutants. Resources for this initiative have been identified and a non-regulatory group of stakeholders (technical in nature) will be convened to discuss the issue and development of new guidance on the topic.

Human Health Temperature Criteria
A RAP member raised concerns about the thermal discharge in Farrar Gut, a tributary to the tidal James River. Numeric temperature criteria do not apply to tidal waters. The RAP member requested the adoption of temperature criteria to prevent thermal discharges from being a risk to humans. In response, DEQ staff provided information to the RAP which showed that the thermal discharge in Farrar Gut is expected to be terminated by the end of 2024 consistent with the Virginia Clean Economy Act (§ 56-585.5). In addition, DEQ has not found any other examples like this in the state.

Climate Change
In response to comments received, Ms. Jutta Schneider (Director of Water Planning) presented to the RAP an overview of how climate change is considered in Total Maximum Daily Load development. She also discussed the current agency strategic planning initiative which is prioritizing ways to incorporate climate change and adaptation in DEQ's water quality and other agency programs.

Nutrient Criteria
In response to comments received, Ms. Schneider summarized the existing programs that address nutrients in Virginia and the work that DEQ is doing to address nutrient over-enrichment. Virginia is relying heavily on the implementation measures and nutrient control strategies from existing programs to include the Chesapeake Bay Watershed Implementation Plan, lakes/reservoirs nutrient criteria, and local nutrient, sediment and bacteria TMDLs. Ms. Schneider stated that actions on the ground are resulting in significant improvement to nutrient control and reduction.

Addition of Footnote to Dinitrophenols Criteria
A RAP member requested the insertion of a footnote for dinitrophenols that specifies that the concentration of 2,4-dinitrophenol can be used to estimate the concentration of all dinitrophenols for compliance purposes, since there is an EPA-approved method for the isomer while there is no EPA method for the pollutant group. DEQ staff are proceeding to address this concern in VPDES implementation guidance.

Water Effects Ratio for Freshwater Copper Criteria
A RAP member requested that DEQ continue to allow the option for establishing permit effluent limits based on the Water Effects Ratio (WER). The WER takes into account the difference between the toxicity of a metal in laboratory dilution water and its toxicity in a receiving stream. They requested that DEQ continue to provide the ability to maintain the WER approach and expressed concerns with removing the hardness-based option which they feel to be technically valid and protective. Staff notes that EPA no longer supports WER-based permit limits or criteria for freshwater copper, since the Biotic Ligand Model reflects the most recent science regarding copper bioavailability and toxicity. The WER approach is still available when insufficient data exists to use the BLM approach.

Implementation Guidance for Narrative Criteria
Multiple commenters and a RAP member requested that DEQ incorporate guidelines for the implementation of narrative criteria into the water quality standards regulation. Currently, water quality programs maintain these guidelines in program-specific implementation guidance manuals, which are revised periodically through the public participation procedures stipulated by §2.2-4002.1 of the Administrative Process Act. The request was for DEQ to incorporate guidelines, but no specific proposal was presented. Ms. Schneider presented to the RAP examples of how narrative criteria are implemented in the water quality assessment and permitting programs.

Finally, it should be noted that there was general consensus among the RAP members for the proposed amendments to the Water Quality Standards. However, there was not unanimous support for the proposed benthic chlorophyll a criteria to protect the recreation use in the North Fork Shenandoah River, South Fork Shenandoah River and mainstem Shenandoah River from persistent, nuisance algae. Two RAP members expressed concerns with the final, proposed revisions. One expressed concern with the duration of the proposal and suggested there should not be a seasonal median, or, if so it should be set higher than what is proposed. They also suggested that the frequency be two exceedances in six years rather than two in three years. The second expressed concern that the spatial expansion of the proposal, which expanded from the initial draft, was too broad. Staff notes these concerns; however, the proposed criteria were supported by the majority of the RAP as well as staff.

ATTORNEY GENERAL CERTIFICATION
These amendments have been forwarded to the Office of the Attorney General for agency statutory authority, but authority has not yet been granted. The amendments will be proposed "contingent upon Attorney General Office statutory authority" if not received by the September Board meeting.

PRESENTER CONTACT INFORMATION

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ATTACHMENTS

Attachments to this memo to aid in your review of these proposed regulatory amendments are as follows:

Attachment 1 - 2021 Triennial Review Regulatory Advisory Panel Membership
Attachment 2 - Summary Table of 2021 Triennial Review Water Quality Standards Amendments
Attachment 3 – Agency Background Document for the Proposed Regulation
Attachment 4 - State Water Control Board, 9 VAC 25-260 Virginia Water Quality Standards, Triennial Review Proposed Amendments, 2021

ATTACHMENT 1

2021 Triennial Review
Regulatory Advisory Panel Membership

Triennial Review 2021
Regulatory Advisory Panel Members and Alternates

• Joe Wood/Patrick Fanning	***Chesapeake Bay Foundation***
• Grace LeRose	***City of Richmond***
• Kevin Whalen	***Friends of NF Shenandoah***
• Evan Branosky	***Home Builders Association of Virginia***
• Jamie Brunkow/Anna Killius	***James River Association***
• Phillip Musegaas	***Potomac Riverkeeper Network***
• Jamie S. Heisig-Mitchell/ Richard Sedgley	***VA Association of Municipal Wastewater Agencies (VAMWA)***
• Martha Moore	***VA Farm Bureau Federation***
• Andrew Parker	***VA Manufacturers Association (VMA)***
• David Sligh	***Wild Virginia***
• Leigh Mitchell	***Upper Mattaponi Indian Tribe/Regional Tribal Operations Committee***
• Juan J. Vicenty-Gonzalez/ Denise Hakowski/Greg Voight	***EPA Region 3***
• Rene Hypes	***Dept. of Conservation & Recreation (DCR)***
• Todd Egerton	***Virginia Dept. of Health (VDH)***
• Aaron Moses	***Virginia Dept. of Health (VDH)***
• Ernie Aschenbach	***Dept. of Wildlife Resources (DWR)***

ATTACHMENT 2

Summary Table of 2021 Triennial Review Water Quality Standards Amendments

Amendment Proposal Summary Table – Triennial Review, September 2021

Section	Draft Proposed Amendments
9VAC25-260-50. Numerical criteria for dissolved oxygen, pH, and maximum temperature. Footnote ****.	Added missing quadruple asterisk (****) to pH column.
9VAC25-260-140. Criteria for surface water	Aquatic life (Aluminum) & human health updates (20) to criteria for 10 toxic pollutants. Amended language for Biotic Ligand Model (BLM) option for copper criteria (9VAC25-260-140.G) and amended language for Copper in 9VAC25-260-140.B. Correct a couple of Chemical Abstracts Service (CAS) numbers. Deleted Bis(chloromethyl) Ether.
9VAC25-260-185. Criteria to protect designated uses from the impacts of nutrients and suspended sediment in the Chesapeake Bay and its tidal tributaries.	Amended 5 Chesapeake Bay segments increasing Submerged Aquatic Vegetation acreages and water clarity criteria.
9VAC25-260-187. Criteria for man-made lakes and reservoirs to protect aquatic life and recreational designated uses from the impacts of nutrients.	Addition of 1 impoundment to list.
9VAC25-260-310. Special standards and requirements.	Deleted Special Standard "y". Added Special Standard "ii" which addresses nuisance filamentous algae growth on the North Fork, South Fork, and mainstem Shenandoah Rivers.
9VAC25-260-390. 6 Potomac River Basin (Potomac River Subbasin).	Deletion of Special Standard "y" notation in special standards column.
9VAC25-260-400. 1c Potomac River Basin (Shenandoah River Subbasin).	Added notation for Special Standard "ii".
9VAC25-260-400. 2 Potomac River Basin (Shenandoah River Subbasin).	Added notation for Special Standard "ii". Deleted ESW notation "12" as in was in wrong basin section.
9VAC25-260-400. 2b Potomac River Basin (Shenandoah River Subbasin).	Added notation for Special Standard "ii".
9VAC25-260-400. 3 Potomac River Basin (Shenandoah River Subbasin).	Added notation for ESW-12 to correct basin section.
9VAC25-260-400. 3a Potomac River Basin (Shenandoah River Subbasin).	Clarified segment description.
9VAC25-260-400. 5c Potomac River Basin (Shenandoah River Subbasin).	Clarified application of PWS designation
9VAC25-260-400. 5d Potomac River Basin (Shenandoah River Subbasin).	Clarified application of Stockable Trout Waters application.
9VAC25-260-400. 5e Potomac River Basin (Shenandoah River Subbasin).	Clarified application of Stockable Trout Waters application.
9VAC25-260-400. 6 Potomac River Basin (Shenandoah River Subbasin).	Added notation for Special Standard "ii".
9VAC25-260-400. 6a Potomac River Basin (Shenandoah River Subbasin).	Corrected Water body classification from Class IV to Class V waters (Stockable Trout).
9VAC25-260-410. 1g James River Basin (Lower).	Clarified application of Class III water body classification for Shingle Creek.
9VAC25-260-420. 11e. James River Basin (Middle).	Clarification of segment description.
9VAC25-260-440. 3. Rappahannock River Basin	Clarification of segment description.

9VAC25-260-440. 3a. Rappahannock River Basin	Expansion of PWS designation to include PWS designation for Lake Mooney intake.
9VAC25-260-440. 4. Rappahannock River Basin.	Clarification of segment description and placement of ESW-28 in correct basin segment.
9VAC25-260-440. 4g. Rappahannock River Basin.	Clarification of tributary location.
9VAC25-260-470. 2b. Chowan and Dismal Swamp (Chowan River Subbasin).	Swampwater delineation clarification for Cabin Point Swamp.
9VAC25-260-500. 1. Tennessee and Big Sandy River Basins (Clinch River Subbasin).	Clarified application of Stockable Trout waters (Class V) classification for North Fork Powell River.

ATTACHMENT 3

Agency Background Document for the Proposed Regulation

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Proposed Regulation
Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9 VAC25-260
VAC Chapter title(s)	Water Quality Standards
Action title	Rulemaking to adopt new, update or cancel existing water quality standards as required by § 62.1-44.15 of the Code of Virginia and the federal Clean Water Act, 33 U.S.C. §§ 1251
Date this document prepared	

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 (1VAC7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*.

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

The subject matter of the rulemaking will include updated numerical and narrative criteria, use designations and other policies contained in the Water Quality Standards Regulation (9 VAC 25-260).

The intent of this rulemaking is to protect designated and beneficial uses of state waters by adopting regulations that are technically correct, necessary and reasonable. These standards will be used in setting Virginia Pollutant Discharge Elimination System Permit limits and for evaluating the waters of the Commonwealth for inclusion in the Clean Water Act 305(b) report and on the 303(d) list. Waters not meeting standards may require development of a Total Maximum Daily Load, effluent limitations, or further analysis of use removal or modification under the Clean Water Act at 303(e) and Code of Virginia § 62.1-44.19:7.

This rulemaking is needed because the last triennial review was completed in July 2017 and new scientific information is available to update the water quality standards. Changes to the regulation are also needed to improve permitting, monitoring and assessment programs. In addition, the State Water Control Board (Board) must fulfill the legal mandates for a three-year review under the Code of Virginia, per §62.1-44.15(3a), and federal regulations at 40 CFR 131.

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the "Definitions" section of the regulation.

BLM	Biotic Ligand Model
Board	State Water Control Board
CAS	Chemical Abstracts Service
Department	Virginia Department of Environmental Quality (or DEQ)
DWR	Virginia Department of Wildlife Resources
EPA	U.S. Environmental Protection Agency
PWS	Public Water Supply
RAP	Regulatory Advisory Panel
TMDL	Total Maximum Daily Load
VPDES	Virginia Pollutant Discharge Elimination System

Mandate and Impetus

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, or board decision). 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."

Federal and state mandates in the Clean Water Act at 303(c), 40 CFR 131 and the Code of Virginia in §62.1-44.15(3a) require that water quality standards be adopted, modified or cancelled every three years. These are the most relevant laws and regulations.

Legal Basis

Identify (1) the promulgating agency, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia and Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating agency to regulate this specific subject or program, as well as a reference to the agency's overall regulatory authority.

The promulgating entity is the State Water Control Board (Board).

The Clean Water Act authorizes restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters. The Clean Water Act at 303(c) (1) requires that the states hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards.

The Federal regulations at 40 CFR 131 authorize requirements and procedures for developing, reviewing, revising and approving water quality standards by the States as authorized by section 303(c) of the Clean Water Act. 40 CFR 131 specifically requires the states to adopt criteria to protect designated uses.

The State Water Control Law authorizes protection and restoration of the quality of state waters, safeguarding the clean waters from pollution, prevention and reduction of pollution and promotion of water conservation. The State Water Control Law (Code of Virginia) at §62.1-44.15(3a) requires the Board to establish standards of quality and to modify, amend or cancel any such standards or policies. It also requires the Board to hold public hearings from time to time for the purpose of reviewing the water quality standards, and, as appropriate, adopting, modifying or canceling such standards.

The correlation between the proposed regulatory action and the legal authority identified above is that the amendments being considered are modifications of criteria that will protect designated uses and criteria and designated uses are requirements of the Water Quality Standards.

The authority to adopt standards as provided by the provisions in the previously referenced citations is mandated, although the specific standards to be adopted or modified are discretionary to the Environmental Protection Agency and the state.

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it's intended to solve.

The rulemaking is essential to the protection of health, safety or welfare of the citizens of the Commonwealth because proper water quality standards protect water quality and living resources of Virginia's waters for the designated uses of aquatic life, wildlife, recreation, public water supply, shellfish consumption, and fish consumption.

The intent of this rulemaking is to protect designated and beneficial uses of state waters by adopting a regulation that is technically correct, necessary, and reasonable. Potential issues that may need to be addressed are listed in the "Substance" section. It should be noted that all sections of the regulation are open for comment during this mandated triennial review and a revision, addition or deletion could potentially occur in any section of the regulation. However, revisions under consideration to date have been listed in the "Substance" section.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the "Detail of Changes" section below.

This rulemaking will modify, add or delete any section, criteria, use designation, standard, and policy to conform to EPA guidance, clarify state intent, implement state programs (e.g., permitting, monitoring and assessments), and improve water quality or protect beneficial uses. The proposed amendments to the Water Quality Standards are summarized below.

Section 9VAC25-260-50
Add missing "****" (quadruple asterisk) to pH column to clarify that pH criteria apply only to the epilimnion of a lake/reservoir when thermally stratified.

Section 9VAC25-260-140 (Table of Parameters):

a) Add freshwater aluminum criteria for the protection of aquatic life according to the 2018 EPA nationally recommended criteria.
b) Correction of identified errors:
    i) Ammonia CAS number is formatted with dashes, all other CAS numbers do not have dashes
    ii) Ammonia CAS number is incorrect 766414; should be 7664417
    iii) Correct name for Bis2-Chloroisopropyl Ether (2,2'-Oxybis(1-Chloropropane)
    iv) Chlordane CAS number 57749 is for mixed isomers; EPA Regional Screening Level (RSL) uses 12789036 for Chlordane, this is not wrong but inconsistent
    v) Nickel CAS number is incorrect 744002; should be 7440020
    vi) Include CAS number for Uranium (7440611)
    vii) Tributyltin CAS number is incorrect 60105 (no such CAS number); EPA RSL uses E1790678
c) Delete Bis (chloromethyl) Ether.
d) Copper Biotic Ligand Model (BLM) Language – Edit language in Table 140.B to state where the Board has determined that a sufficient dataset of model input parameters is available, the BLM shall be used to determine copper criteria and that the hardness-based criteria will be used when sufficient input parameters are not available. Language in Section 140.G is amended similarly.
e) Update 20 human health criteria for the following 10 parameters to reflect updated exposure factors recommended by EPA in 2011: antimony, 2,3,7,8-tetrachlorodibenzo-p-dioxin, nickel, n-nitrosodimethylamine, n-nitrosodiphenylamine, n-nitrosodi-n-propylamine, total PCBs, selenium, thallium, and zinc
f) Add language to Footnotes 3 and 4 stating that human health criteria are based on the assumption of an average amount of exposure on a long-term basis.

Section 9VAC25-260-185.B – Chesapeake Bay Criteria

Submerged Aquatic Vegetation (SAV) and Water Clarity acreages for 5 Bay segments are increased to match most recent Chesapeake Bay Program recommendations.

Section 9VAC25-260-187 (Addition of Lake Mooney):

DEQ staff recommend application of lake nutrient criteria to a relatively recently constructed water supply reservoir in the Rappahannock River basin (Lake Mooney).

Section 9VAC25-260-310 (Special Standards)

Delete special standard "y" (ammonia criteria for freshwater tidal tributaries of the Potomac River) as it is superseded by freshwater ammonia criteria that became effective in 2020.

Addition of special standard "ii" which is a benthic chlorophyll-*a* threshold that protects the recreational use from persistent, nuisance filamentous algae in certain main-stem sections of the North Fork Shenandoah River, South Fork Shenandoah River, and Shenandoah River.

River Basin Issues (9VAC25-260-360 through 540):

a) Add, modify or delete trout waters as appropriate.
b) Add, modify or delete public water supplies designations as appropriate.
c) Adjust temperature criteria or application of temperature criteria to waters stocked with trout by DWR in the winter with the intent of supplying the public with seasonal trout fishing opportunities only in the winter but not in the summer.
d) Add or correct Class designations as appropriate.
e) Corrections to section descriptions in river basin tables for clarity and/or accuracy.

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or

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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, include a specific statement to that effect.

The primary advantage to the public is that the updated numerical toxics criteria are based on better scientific information to protect aquatic life and human health. The disadvantage is that criteria that become more stringent may result in increased costs to the regulated community. However, the goal is to set realistic, protective goals in water quality management and to maintain the most scientifically defensible criteria in the Water Quality Standards regulation. EPA has also provided guidance that these criteria are "approvable" under the Clean Water Act.

The advantage to the agency or the Commonwealth that will result from the adoption of these amendments will be more accurate and scientifically defensible permit limits, assessments and clean-up plans (TMDLs). These are discussed under the "Purpose" section where the goals of the proposal, the environmental benefits, and the problems the proposal is intended to solve are discussed.

The regulated community may find that the amendments pertinent to their operations may require additional capital or operating costs for control in their discharge, particularly where the numerical criteria are more stringent (see Economic Impact).

There is no disadvantage to the agency or the Commonwealth that will result from the adoption of these amendments.

Requirements More Restrictive than Federal

Identify and describe any requirement of the regulatory change which is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and 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 specific statement to that effect.

There are no requirements that exceed applicable federal requirements.

Agencies, Localities, and Other Entities Particularly Affected

Identify any other state agencies, localities, or other entities particularly affected by the regulatory change. "Particularly affected" are those that are likely to bear any identified disproportionate material impact which would not be experienced by other agencies, localities, or entities. "Locality" can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulation or regulatory change are most likely to occur. If no agency, locality, or entity is particularly affected, include a specific statement to that effect.

Other State Agencies Particularly Affected
No other state agencies are anticipated to be particularly affected by these regulations with the exception of those which operate facilities subject to VPDES permitting that may potentially be impacted by the proposed amendments as related to discharge permits. Staff does not anticipate this to impact many facilities.

Localities Particularly Affected
In general, Water Quality Standards are developed and implemented for the protection of all designated uses statewide. However, due to the site-specific nature of some amendments, the below localities may bear a disproportionate material impact not experienced by other localities due to the location of these

localities relative to the proposed amended criteria for benthic chlorophyll-a criteria in the North Fork Shenandoah River, South Fork Shenandoah River, or Shenandoah River.

Counties: Augusta, Clark, Lee, Page, Rockingham, Shenandoah, Warren.
Towns: Luray, Shenandoah.

Other Entities Particularly Affected
No other entities are anticipated to be affected.

Economic Impact

Pursuant to § 2.2-4007.04 of the Code of Virginia, identify all specific economic impacts (costs and/or benefits), anticipated to result from the regulatory change. When describing a particular economic impact, specify which new requirement or change in requirement creates the anticipated economic impact. Keep in mind that this is change versus the status quo.

Impact on State Agencies

For your agency: projected costs, savings, fees or revenues resulting from the regulatory change, including: a) fund source / fund detail; b) delineation of one-time versus on-going expenditures; and c) whether any costs or revenue loss can be absorbed within existing resources	There will be no additional costs to the state/agency. Existing water quality monitoring programs (and related funding sources) will continue to support the proposed changes. Correct waterbody classifications such as Class VII (swampwaters) and trout waters modifications may result in determination that the aquatic life use is not impaired due to application of criteria appropriate for the waterbody type, thus avoiding development of costly and inappropriate TMDLs.
For other state agencies: projected costs, savings, fees or revenues resulting from the regulatory change, including a delineation of one-time versus on-going expenditures.	State agency wastewater treatment plants may be affected by the proposed changes to the Table of Parameters. Staff does not anticipate this to impact many facilities.
For all agencies: Benefits the regulatory change is designed to produce.	The regulatory changes produce indirect benefits through protection of water quality and living resources of Virginia's waters for the designated uses of aquatic life, wildlife, recreation, public water supply, shellfish consumption, and fish consumption. A general benefit of the proposed amendments will be scientifically correct and legally defensible water quality standards to protect the surface waters of Virginia.

Impact on Localities

Projected costs, savings, fees or revenues resulting from the regulatory change.	Some localities that operate wastewater treatment plants may be affected by the proposed changes to the Table of Parameters or the Special Standards section.
Benefits the regulatory change is designed to produce.	The regulatory changes produce indirect benefits through protection of water quality and living resources of Virginia's waters for the designated uses of aquatic life, wildlife, recreation, public water supply, shellfish consumption, and fish consumption. A general benefit of the proposed

	amendments will be scientifically correct and legally defensible water quality standards to protect the surface waters of Virginia.

Impact on Other Entities

Description of the individuals, businesses, or other entities likely to be affected by the regulatory change. If no other entities will be affected, include a specific statement to that effect.	Wastewater treatment plants and industrial facilities may be affected by the proposed changes to the Table of Parameters or the Special Standards section.
Agency's best estimate of the number of such entities that will be affected. 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.	146 permittees may be affected by the modified language for the copper biotic ligand model. These permittees currently have copper limits. Municipally-owned wastewater treatment plants comprise 36% of these permittees, while industrial facilities make up the rest. There are other permittees that currently do not have copper limits but they may be required to have them when their permits are renewed, if this amendment is adopted. 161 permittees may be affected by the proposed changes to the 20 human health criteria. These permittees currently have a permit limit derived from at least one of the existing criteria. Municipally-owned wastewater treatment plants comprise 34% of these permittees, while industrial facilities make up the rest. There are other permittees that currently do not have permit limits derived from these criteria but they may be required to have them when their permits are renewed, if these amendments are adopted. Permittees that have aluminum in their effluent and that discharge into freshwater may be affected by the addition of the aluminum criteria. The number of potentially affected permittees is unknown. 9 wastewater treatment plants may be affected by the removal of special standard "y".
All projected costs for affected individuals, businesses, or other entities resulting from the regulatory change. Be specific and include all costs including, but not limited to: a) projected reporting, recordkeeping, and other administrative costs required for compliance by small businesses; b) specify any costs related to the development of real estate for commercial or residential purposes that are a consequence of the regulatory change; c) fees; d) purchases of equipment or services; and e) time required to comply with the requirements.	No administrative costs are projected nor are costs for real estate development or additional services.

Benefits the regulatory change is designed to produce.	The regulatory changes produce indirect benefits through protection of water quality and living resources of Virginia's waters for the designated uses of aquatic life, wildlife, recreation, public water supply, shellfish consumption, and fish consumption. A general benefit of the proposed amendments will be scientifically correct and legally defensible water quality standards to protect the surface waters of Virginia.

Alternatives to Regulation

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.

One alternative is to keep the current water quality standard regulation unchanged or to delay the triennial review. The most likely alternative less costly or less intrusive for small businesses would be to not update the aquatic life and human health criteria. Those alternatives were not chosen because the proposed amendments are based upon more recent scientific information and data that provide for improved protection of the designated uses for Virginia's surface waters. Comments submitted in response to the NOIRA were considered, and an ad hoc Regulatory Advisory Panel (RAP) was established to assist the Department in developing the proposed amendments to the Water Quality Standards and to identify any less burdensome or intrusive alternatives. The proposed amendments are necessary to achieve the purpose of the regulatory change.

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, 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) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing 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 regulatory change.

Water Quality Standards do not establish compliance or reporting requirements. The proposed changes in the Water Quality Standards Regulation are implemented through established Department programs, including the VPDES permitting program, the water quality monitoring and assessment programs, and the TMDL program. These programs have the flexibility to implement the existing and proposed amendments to the Water Quality Standards to provide for flexibility in regulatory recordkeeping and water quality monitoring efforts. Economic estimates of the same are provided above.

Periodic Review and Small Business Impact Review Report of Findings

If you are using this form to report the result of a periodic review/small business impact review that is being conducted as part of this regulatory action, and was announced during the NOIRA stage, indicate whether the regulatory change meets the criteria set out in Executive Order 14 (as amended, July 16, 2018), e.g., is necessary for the protection of public health, safety, and welfare; minimizes the economic impact on small businesses consistent with the stated objectives of applicable law; and is clearly written and easily understandable.

In addition, as required by § 2.2-4007.1 E and F of the Code of Virginia, discuss the agency's consideration of: (1) the continued need for the regulation; (2) the nature of complaints or comments received concerning the regulation; (3) the complexity of the regulation; (4) the extent to the 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. Also, discuss why the agency's decision, consistent with applicable law, will minimize the economic impact of regulations on small businesses.

This regulatory action is necessary for the protection of public health and for the protection of the Commonwealth's surface waters and aquatic life. The Water Quality Standards regulation forms the basis upon which effluent discharge limits are set and upon which it is determined whether or not waters are attaining applicable designated uses. Comment received during the Notice Of Intended Regulatory Action ranged from agreement that the proposed amendments are necessary to protect designated uses (i.e. aluminum criteria, human health criteria updates, SAV acreage updates, Shenandoah River filamentous algae criteria) to suggestions for changes to certain Sections to address mixing zone determinations, antidegradation policy implementation, and the need to include certain pollutant parameters in the regulation (i.e. polyfluoroalkyl substances, algal toxins). Federal and state mandates in the Clean Water Act at 303(c), 40 CFR 131 and the Code of Virginia in §62.1-44.15(3a) require that water quality standards be adopted, modified or cancelled every three years. Potential economic impacts would be the result of possibly more stringent VPDES permit limits. Impacts specific to small businesses are not anticipated.

Public Comment

Summarize all comments received during the public comment period following the publication of the previous stage, and provide the agency response. Include all comments submitted: including those received on Town Hall, in a public hearing, or submitted directly to the agency. If no comment was received, enter a specific statement to that effect.

See Attachment 1.

Public Participation

Indicate how the public should contact the agency to submit comments on this regulation, and whether a public hearing will be held, by completing the text below.

In addition to any other comments, the Board is seeking comments on the costs and benefits of the 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.

Anyone wishing to submit written comments for the public comment file may do so by mail, email or fax to David C. Whitehurst, VA Department of Environmental Quality, P.O. Box 1105, Richmond, VA 23218;

Phone: 804-698-4121; Email: David.Whitehurst@deq.virginia.gov. Comments may also be submitted through the Public Forum feature of the Virginia Regulatory Town Hall (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.

Public hearing(s) will be held following the publication of this stage, and notice of the hearing will be posted on the Virginia Regulatory Town Hall (http://www.townhall.virginia.gov) and on the Commonwealth Calendar (https://commonwealthcalendar.virginia.gov/). Both oral and written comments may be submitted at that time.

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.

Detail of Changes

List all regulatory changes and the consequences of the changes. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Use all tables that apply, but delete inapplicable tables.

Table 1: Changes to Existing VAC Chapter(s)

Current chapter-section number	New chapter-section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
9VAC25-260-50. Numerical criteria for dissolved oxygen, pH, and maximum temperature.	N/A	pH column lacked the footnote "****". Footnote "****" states that dissolved oxygen and pH criteria only apply to the epilimnion when the lake/reservoir is stratified.	Specify lake pH applies only to epilimnion when stratified. Added missing quadruple asterisk (****) to pH column. Corrects the absence of the footnote when language for Footnote **** was originally adopted. No impacts expected.
9VAC25-260-140. Criteria for surface water	N/A	Currently no freshwater criteria for aluminum. Use of the Biotic Ligand Model to determine freshwater copper criteria is optional regardless of parameter data availability to run the model. 2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin Antimony Nickel N-Nitrosodimethylamine	Adds nationally recommended freshwater criteria for aluminum for the protection of aquatic life. This change could have an economic impact on permittees if aluminum is present in their effluent. Amended language for Biotic Ligand Model (BLM) option for copper criteria (9VAC25-260-140.G) and amended language for Copper in 9VAC25-260-140.B. to state the freshwater criteria for copper shall be calculated using the EPA 2007 Biotic Ligand Model when a sufficient dataset of input parameters to run the BLM is available. More closely conforms to nationally recommended criteria for the protection of aquatic life. This would replace the current widespread use of the hardness-based copper criteria in waters where sufficient BLM parameter data exists. This change could have an economic impact on permittees if copper is present in their effluent. Human health criteria for fish tissue and drinking water have been recalculated for these compounds using updated exposure factors based on 2011 EPA recommendations and to be

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		N-Nitrosodiphenylamine N-Nitrosodi-n-propylamine Total PCBs Selenium Thallium Zinc --- Current parameter name: Bis2-Chloroisopropyl Ether Human health criteria for Bis(chloromethyl) Ether. Human Health criteria footnotes 3 and 4. [3]"Criteria have been calculated to protect human health from toxic effects through fish consumption, unless otherwise noted and apply in all other surface waters not designated as PWS in 9VAC25-260-390 through 9VAC25-260-540." [4]Criteria have been calculated to protect human health from toxic effects through fish consumption, unless otherwise noted and apply in all other surface waters not designated as PWS in 9VAC25-260-390 through 9VAC25-260-540.	consistent with the way all other human health criteria are calculated in the VA WQS. These changes could have an economic impact on permittees if these particular pollutant parameters are present in their effluent. Correction of several Chemical Abstracts Service (CAS) numbers. No impact. Name changed to "2,2'-Oxybis(1-Chloropropane)" for correctness. No impact. Deleted Bis(chloromethyl) Ether. Due to the 38 second half-life of this pollutant and the fact that EPA no longer considers it to be a Priority Pollutant. This change is not expected to have an economic impact on permittees that have this human health poliutant in their effluent. The existing Table of Parameters does not contain language specifying the duration of human health criteria. The following language is proposed to be added to the end of footnotes 3 and 4 of this section: "Human health criteria are based on the assumption of average amount of exposure on a long-term basis." This change is not expected to have an economic impact on permittees that have human health pollutants in their effluent.
9VAC25-260-185. Criteria to protect designated uses from the impacts of nutrients and suspended sediment in the Chesapeake Bay and its tidal tributaries.	N/A	Current SAV and water clarity acreage criteria for 5 Bay segments. Bay segment SAV acres Clarity acres RPPMH 1700 5000 JMSTF2 200 500 JMSTF1 1000 2500 JMSMH 200 500 JMSPH 300 750	Proposed amendment Increases the SAV and water clarity acreage criteria for these segments so they are consistent with the reasoning underlying the SAV criteria for other Bay segments. Bay segment SAV acres Clarity acres RPPMH 5,380 13,450 JMSTF2 266 665 JMSTF1 1,333 3332 JMSMH 531 1328 JMSPH 604 1510 These changes are not expected to have an economic impact on permittees.
9VAC25-260-187. Criteria for man-made lakes and reservoirs to protect aquatic life and recreational designated uses from the impacts of nutrients.	N/A	Lake/reservoir criteria to protect against nutrient over-enrichment do not currently apply to Lake Mooney in Stafford County.	DEQ staff recommend that Lake Mooney in Stafford County be added to this section due to its proposed PWS designation. These changes are not expected to have an economic impact on permittees.
9VAC25-260-310. Special standards and requirements.	N/A	Special Standard "y" is a site-specific, seasonal chronic ammonia criterion that applies to the tidal freshwater Potomac River and tidal tributaries that enter the tidal freshwater Potomac River from Cockpit Point (below Occoquan Bay) to the fall line at Chain Bridge. Currently no Special Standard "ii".	Special Standard "y" is proposed for deletion. This ammonia criterion does not consider the presence of mussels, which are very sensitive to ammonia. The statewide ammonia criteria adopted by the Board in 2019 which became effective in 2020 stipulates that mussels are present unless the absence of mussels has been adequately demonstrated. This special standard is being proposed for removal. This change could have an economic impact on permittees. Added Special Standard "ii" which addresses nuisance filamentous algae growth on the North Fork Shenandoah River, South Fork Shenandoah

			River, and mainstem Shenandoah River. This proposed special standard may have an economic impact on permittees.
9VAC25-260-390. 6 Potomac River Basin (Potomac River Subbasin).	N/A		Deletion of Special Standard "y" notation in special standards column.
9VAC25-260-400. 1 Potomac River Basin (Shenandoah River Subbasin).	N/A	Currently no notation for "ii".	Added notation for Special Standard "ii".
9VAC25-260-400. 1a Potomac River Basin (Shenandoah River Subbasin).	N/A	Currently no notation for "ii".	Added notation for Special Standard "ii".
9VAC25-260-400. 1c Potomac River Basin (Shenandoah River Subbasin).	N/A	Currently no notation for "ii".	Added notation for Special Standard "ii".
9VAC25-260-400. 2 Potomac River Basin (Shenandoah River Subbasin).	N/A	Currently no notation for "ii".	Added notation for Special Standard "ii". Deleted ESW notation "12" as in was in wrong basin section.
9VAC25-260-400. 2b Potomac River Basin (Shenandoah River Subbasin).	N/A	Currently no notation for "ii".	Added notation for Special Standard "ii".
9VAC25-260-400. 3 Potomac River Basin (Shenandoah River Subbasin).	N/A	Currently no notation for "ii".	Added notation for Special Standard "ii". Added notation for ESW-12 to correct basin section.
9VAC25-260-400. 3a Potomac River Basin (Shenandoah River Subbasin).	N/A	South River from the dam above Waynesboro (all waters of the impoundment).	South River from the former location of the dam above Waynesboro ~~(all waters of the impoundment)~~. Clarified segment description. No impacts expected.
9VAC25-260-400. 5c Potomac River Basin (Shenandoah River Subbasin).	N/A	Dry River (Rockingham County) from Harrisonburg's raw water intake (approximately 11.7 miles above its confluence with the North River) to a point 5 miles upstream, unless otherwise designated in this chapter.	Dry River (Rockingham County) from Harrisonburg's raw water intake (approximately 11.7 miles above its confluence with the North River) to a point 5 miles upstream including Skidmore Fork upstream to the headwaters of Switzer Lake, unless otherwise designated in this chapter. Clarified application of PWS designation. No impacts expected
9VAC25-260-400. 5d Potomac River Basin (Shenandoah River Subbasin).	N/A	5d VI Dry River and its tributaries from 5 miles above Harrisonburg's raw water intake to its headwaters.	5d VI Dry River and its tributaries from 5 miles above Harrisonburg's raw water intake to its headwaters. V Stockable Trout Waters in Section 5d viii Switzer Lake from its dam upstream to the impoundment headwaters.

		iv Skidmore Fork from its confluence with Dry River upstream including all named and unnamed tributaries.	iv Skidmore Fork from its confluence with Dry River upstream including all named and unnamed tributaries. This does not include Switzer Lake which are Class V Stockable Trout Waters. Clarified application of Stockable Trout Waters application. No impacts expected
9VAC25-260-400. 5e Potomac River Basin (Shenandoah River Subbasin).	N/A	5e VI PWS North River and its tributaries from Staunton Dam to their headwaters. VI Natural Trout Waters in Section 5e iv North River from Elkhorn Dam upstream including all named and unnamed tributaries.	5e VI PWS North River and its tributaries from Staunton Dam to their headwaters unless otherwise designated in this chapter. V Stockable Trout Waters in Section 5e iiiee Elkhorn Lake from the dam upstream to the impoundment headwaters. VI Natural Trout Waters in Section 5e iv North River from the headwaters of Elkhorn ~~Dam~~ Lake upstream including all named and unnamed tributaries. Clarified application of Stockable and Natural Trout Waters application and added seasonal Stockable Trout waters special standard "ee". No impacts expected
9VAC25-260-400. 6 Potomac River Basin (Shenandoah River Subbasin).	N/A	Currently no notation for "ii".	Added notation for Special Standard "ii".
9VAC25-260-400. 6a Potomac River Basin (Shenandoah River Subbasin).	N/A	IV PWS Little Passage Creek from the Strasburg Reservoir Dam upstream to its headwaters, unless otherwise designated in this chapter.	~~IV~~ V PWS Little Passage Creek from the Strasburg Reservoir Dam upstream to its headwaters, unless otherwise designated in this chapter. Corrected Water body classification from Class IV to Class V waters (Stockable Trout). No impacts expected
9VAC25-260-410. 1g James River Basin (Lower).	N/A	1g III Shingle Creek from its confluence with the Nansemond River to its headwaters in the Dismal Swamp.	1g III Shingle Creek from ~~its confluence with the Nansemond River~~ the head of tidal waters to its headwaters in the Dismal Swamp unless otherwise designated in this chapter. Clarified application of Class III water body classification for Shingle Creek. No impacts expected
9VAC25-260-420. 11e. James River Basin (Middle).	N/A	11e III James River and its tributaries, excluding Blackwater Creek, from Six Mile Bridge to the Business Route 29 bridge in Lynchburg.	11e III James River and its tributaries, excluding Blackwater Creek, from Six Mile Bridge to the ~~Business Route 29 bridge~~ 5th Street Bridge in Lynchburg. Clarification of segment description. No impacts expected.
9VAC25-260-440. 3. Rappahannock River Basin	N/A	The Rappahannock River from the Route 1 Alternate Bridge at Fredericksburg upstream to the low dam water intake at Waterloo (Fauquier County.	The Rappahannock River from the Route 1 Alternate Bridge at Fredericksburg upstream ~~to the low dam water intake at Waterloo (Fauquier County)~~ to its headwaters, unless otherwise designated in this chapter. Clarification of segment description. No impacts expected.
9VAC25-260-440. 3a. Rappahannock River Basin	N/A	The Rappahannock River and its tributaries from Spotsylvania County's raw water intake near Golin Run to points 5 miles upstream (excluding Motts	The Rappahannock River and its tributaries from Spotsylvania County's raw water intake near Golin Run to points 5 miles upstream of the Rocky Pen Run Reservoir (Lake Mooney) pump

		Run and tributaries, which is in Section 4c).	and store intake (excluding Motts Run and tributaries, which is in Section 4c). Expansion of PWS designation to include PWS designation for Lake Mooney intake. No impacts expected.
9VAC25-260-440. 4. Rappahannock River Basin.	N/A	4 III ESW 17,18 Free flowing tributaries of the Rappahannock from Blandfield Point to its headwaters, unless otherwise designated in this chapter.	4 III ESW 17,18, 28 Free flowing tributaries of the Rappahannock from ~~Blandfield Point~~ from the Route 1 Alternate Bridge at Fredericksburg to its headwaters, unless otherwise designated in this chapter. Clarification of segment description and placement of ESW-28 in correct basin segment. No impacts expected.
9VAC25-260-440. 4g. Rappahannock River Basin.	N/A	4g III Deep Run and its tributaries.	4g III Deep Run and its tributaries (Stafford and Fauquier Counties). Clarification of tributary location. No impacts expected.
9VAC25-260-470. 2b. Chowan and Dismal Swamp (Chowan River Subbasin).	N/A	Cabin Point Swamp from its confluence with the Nottoway River to its headwaters.	Cabin Point Swamp and its tributaries from its confluence with the Nottoway River to its headwaters. Swampwater delineation clarification for Cabin Point Swamp. No impacts expected.
9VAC25-260-500. 1. Tennessee and Big Sandy River Basins (Clinch River Subbasin).	N/A	North Fork Powell River from the confluence of Straight Creek to its headwaters.	North Fork Powell River from the confluence of Straight Creek upstream to ~~its headwaters~~ the Keokee Lake dam. Clarification of application of Stockable Trout waters (Class V) classification for North Fork Powell River. No impacts expected.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please 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 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.

It is not anticipated that this regulation will have a direct impact on the institution of the family and family stability.

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ATTACHMENT 1

Summary of Comments from the Triennial Review
Notice of Intended Regulatory Action
Comment period March 1, 2021 – March 31, 2021

Commenter	Comments – General/Miscellaneous	Agency Response
Chesapeake Bay Foundation	They urge DEQ to adopt a policy for incorporating climate change policy into the water quality standards framework. This effort is fully consistent with DEQ's stated mission, directed by recent executive orders, and recent legislation clarifies the authority to address this issue.	Discussion of incorporating climate change policy was had during RAP meetings. The RAP was informed that work is ongoing to address climate change through the agency strategic planning process.
Chesapeake Bay Foundation	They recommend that DEQ draw upon Chlorophyll-a criteria efforts in the James River to move forward with establishing numeric chlorophyll criteria for all tidal tributaries of the Chesapeake Bay.	The recommendation is noted.
Chesapeake Bay Foundation	They recommend DEQ continue and accelerate its work to establish numeric standards for turbidity for the protection of aquatic life and other designated uses, consistent with a recent State Water Control Board directive.	Turbidity criteria development is being addressed through a separate rulemaking.
James River Association	DEQ should incorporate climate change modeling and planning into TMDLs. They stated that the importance of DEQ's role in climate change policy was underscored by 2020 legislation, which focused DEQ's mission on addressing climate change by "…ensuring that climate impacts and climate resilience are taken into account across all programs and permitting processes."	Discussion of incorporating climate change policy was had during RAP meetings. The RAP was informed that work is ongoing to address climate change through the agency strategic planning process.
Wild Virginia Protect Our Water Heritage Rights Waterkeepers Chesapeake	They stated the State Water Control Board should adopt numeric water quality criteria for phosphorus and nitrogen to prevent excessive or nuisance growths of algae and other aquatic plants for all state waters.	Virginia relies on implementation measures from existing programs that include Chesapeake Bay Watershed Implementation Plan, lakes/reservoirs nutrient criteria, and local TMDLs. Actions on the ground are resulting in significant improvement to nutrient control and reduction. Current work on Shenandoah River algae criteria and HAB advisories incorporated into the assessment guidance is also ongoing.
	Comments – Section 20: Narrative Criteria	
Potomac Riverkeeper Network and Shenandoah Riverkeeper	Wording and methods of applying the narrative criteria are insufficient to fully protect Virginia's waters and meet legal mandates. Regulatory changes are necessary to avoid misapplication of narrative criteria provisions.	The comments are noted. Narrative criteria are applied in many ways, including the biological

	DEQ should publish implementation plans for use of the narrative criteria in all their programs. Despite documented impairments in the Shenandoah River and its North and South Forks DEQ has refused to designate these waters as impaired, despite clear and abundant evidence that the pollution problems interfere with designated and existing uses. DEQ has not limited nutrient pollution from discharges that contribute to the degraded conditions. It is urgent that DEQ develop reliable and well-supported procedures for developing limits and pollution control measures based on narrative criteria. This procedure must be broad enough to guide actions in VPDES permitting, CWA section 401 certifications or any other process where the State is obligated to carry out the mandates of their WQS. Narrative criteria must be fully applied to address historic and existing impairments and losses of designated and existing uses.	monitoring of upland and coastal streams, fish consumption advisories, shellfish harvesting, beach closures, and Whole Effluent Toxicity (WET) testing. The measures to support WQS narrative criteria include: biennial Water Quality Assessments, VPDES compliance monitoring of Water Quality Based Effluent Limits, and enforcement actions against permitted and unpermitted dischargers.
Wild Virginia Protect Our Water Heritage Rights Waterkeepers Chesapeake	They recommended that the State Water Control Board (Board) should adopt guidelines for implementation of the state's narrative water quality criteria as part of the water quality standards regulations. They asserted that it is necessary and appropriate for the state to incorporate policies or guidelines into the regulations to ensure the narrative criteria are applied consistently. The approach they proposed would be consistent with other implementation in the standards such as the policy for mixing zones. They also provided DEQ's use of the Stream Condition Index as applied through the biological monitoring program for assessment purposes. They stated that the fact that applying regulations such as narrative criteria is difficult is not a valid or acceptable excuse for failing to do so. They stated the Mountain Valley Pipeline (MVP) has caused serious problems in dozens of waterbodies but DEQ has refused to acknowledge WQS violations due to resistance to the use of narrative criteria to control solids or turbidity.	Currently, DEQ water quality programs maintain these guidelines in program-specific implementation guidance manuals, which are revised periodically through the public participation procedures stipulated by §2.2-4002.1 of the Administrative Process Act. DEQ staff believe that there are more benefits to keeping implementation policies outside of the water quality standards regulation than there are downsides. Regarding turbidity controls, a separate rulemaking to address numeric turbidity criteria is currently under way.
Commenter	**Comments – Section 20: Mixing Zones**	
Chesapeake Bay Foundation	Evaluate the appropriate process and use of mixing zones specifically in context of discharges from coal ash ponds.	This issue was discussed with the RAP. Mixing zones will be addressed through a non-regulatory process; a non-regulatory group of stakeholders will be convened to discuss the issue and development of new guidance on the issue. DEQ is considering a draft framework and is looking at other approaches. Changes to the WQS mixing zone language are not being considered during this rulemaking.
James River Association	DEQ should review and consider revisions to the mixing zone policy and evaluate the appropriate process and use	See above response.

	of mixing zones specifically in context of discharges from coal ash ponds. They requested that DEQ conduct a review of the extent to which mixing zones are currently relied upon in permitting assumptions and compile data on potentially overlapping mixing zones. As a part of the triennial review DEQ should assess the appropriateness of regulatory updates to ensure mixing zone policy is not a barrier to achieving designated uses and is protective of all aquatic life, including passing, drifting, and resident organisms.	
Commenter	**Comments – Section 30: Antidegradation**	
Potomac Riverkeeper Network and Shenandoah Riverkeeper	Procedures for applying the antidegradation policy must be changed. *De minimis* provisions are not justified by any technical rationale and are not allowable under Clean Water Act or State Water Control Law. The practice of allowing waters to be degraded for all other parameters because one or more criteria are violated and tier analysis assigns Tier 1 status dooms high quality features of thousands of waters across the state to degradation.	The comment has been noted. Changes to the WQS antidegradation policy are not being considered during this rulemaking.
Commenter	**Comments – Section 140: Criteria**	
Potomac Riverkeeper Network and Shenandoah Riverkeeper	VA must promulgate numeric criteria in this regulatory action to address water quality problems caused by sediment and nutrient pollution. Enforcement of narrative criteria is generally reactive. The ability to act proactively through numeric criteria is practically and legally required to protect State waters.	See responses above which address the topic of turbidity rulemaking and how DEQ ensures protection of the water quality standards with regard to nutrients.
U.S. Environmental Protection Agency	They encourage Virginia to adopt updated Aluminum criteria for the protection of aquatic life. In 2018, EPA published *Aquatic Life Ambient Water Quality Criteria – Aluminum* (EPA 822-R-18-001), which provides updated criteria and recommendations for the protection of freshwater aquatic life uses. They also encourage Virginia to delete the current hardness-based aquatic life criteria for copper and adopt the nationally recommended Biotic Ligand Model-based (BLM) criteria for copper statewide as well as adopting aquatic life criteria for selenium. Also recommend consideration of adopting human health criteria for the algal toxins Mycrocystin and Cylindrospermopsin. These recommendations are intended as guidance to states to consider when developing water quality standards. Alternatively, these recommendations can be used as the basis of swimming advisories for notification purposes in recreational waters to protect the public.	The comment has been noted. The proposal includes aluminum criteria and changes to language related to the copper BLM-derived criteria to increase its usage when sufficient model parameter data is available. As noted in the comment, states have the discretion to adopt the EPA recommended thresholds as swimming advisory levels or as water quality criteria. It is DEQ staff position that water quality assessments regarding HABs should rest on swimming advisories issued by the Department of Health (VDH). VDH may use the EPA thresholds for the basis of their advisories, but may also base advisories on other lines of evidence, such as cyanobacterial cell counts.
Fairfax County Water Authority	They expressed concerns with rising concentrations of sodium in the Fairfax County public water supply sources — the Occoquan Reservoir and Potomac River. They state that sometimes the concentrations surpass	The comments have been noted. Sodium and PFAS criteria are not being addressed during this

	EPA advisory levels for sensitive populations and that establishing a sodium water quality standard for freshwater public water supply (PWS) designated waters is an important part of a comprehensive approach to address this issue. Virginia also needs to establish water quality criteria for polyfluoroalkyl substances (PFAS) for PWS designated waters. As with sodium, the Commonwealth needs an approach focused on source reduction and management to address the emerging PFAS challenge. They state that establishing water quality standards for PFAS compounds in freshwater PWS designated waters is an important strategy to prevent these chemicals from getting into drinking water supplies.	rulemaking. The Agency recently coordinated the development of a Salt Management Strategy to address excess salts in surface waters in Northern Virginia. Regarding PFAS, during one of the RAP meetings, DEQ shared Virginia's PFAS approach. DEQ is involved in a PFAS workgroup convened by the Virginia Department of Health. The VDH Office of Drinking Water is conducting research that may lead to recommended maximum contaminant levels for inclusion in the regulations of the Board of Health..
Chesapeake Bay Foundation, James River Association, Potomac Riverkeeper Network	DEQ should adopt criteria for the cyanotoxins Mycrocystin and Cylindrospermopsin to protect recreational designated uses and minimize human health impacts from cyanobacteria blooms and algal toxins.	The comment is noted. Please refer to the above response regarding cyanobacteria.
Chesapeake Bay Foundation, James River Association, Southern Environmental Law Center	Encourage DEQ to interpret the narrative criteria and/or establish a plan to assess and develop water quality standards for Per- and polyfluoroalkyl substances (PFAS).	The comments are noted. Please refer to the above response regarding PFAS management strategies.
James River Association	DEQ should evaluate human health-based temperature standards. During the 2004 reissuance of the Chesterfield Power Station VPDES permit, JRA raised concerns regarding the temperature of the cooling water discharge entering Farrar Gut and its effect on primary contact use. They stated that temperatures in Farrar Gut can exceed 104°F, and the Gut is a heavily used recreational area. Temperatures above 104°F exceed VDH's Swimming Pool Regulations Governing the Posting of Water Quality Results which restricts temperatures to a maximum of 104°F in pools and spas. They provided a DEQ water permits staff response that agreed that the Virginia Water Quality Standards should be revised to incorporate numeric temperature standards relating to human health (primary contact use) and also stated this issue will be raised during the next triennial review of the standards.	The comments are noted. This issue was discussed at one of the RAP meeting. DEQ permitting staff noted that operational changes at the Chesterfield Power Station are anticipated to eliminate excessive thermal loads to Farrar Gut by the end of 2024.
City of Richmond	They stated their interest in the proposed addition of aluminum criteria for the protection of aquatic life as these water quality standards form the basis for the inclusion of effluent permit limits which is of particular interest to Richmond Dept. of Public Utilities.	The comments are noted.
Southern Environmental Law Center	They urged the Board and DEQ to explicitly interpret existing narrative water quality standards to cover PFAS and to assess the development of numeric water quality standards for PFAS as part of the triennial review. They stated that it is well established that PFAS are a threat to the health and safety of the public and to aquatic life.	The comment is noted. Please refer to the previous response regarding PFAS management strategies.

Virginia Association of Municipal Wastewater Agencies	They asked that statistically valid methods to determine design flows be considered as an alternative to use of specified design flows (9VAC25-260-140.B footnote 6). They stated that this provision and EPA guidance have been used successfully in some instances to address permitting issues and they believe there should be consideration of a broader provision applicable to permitting and other program uses. They also requested a deeper review of EPA's revised human health criteria as to the suitability of EPA's default exposure assumptions (exposure factors) to Virginia.	The comment is noted. Changes to specified design flows in the WQS are not anticipated during this rulemaking. Exposure factors for the calculation of human health are appropriate for the compounds and included in the proposal.
Virginia Manufacturers Association	They stated there is no avenue to monitor bis(chloromethyl) ether (CAS Number 542881) and that laboratories are not able to analyze for this compound. EPA removed it from the priority pollutant list under 40 CFR Part 423 and VMA would like DEQ annotate this criterion in the water quality standards to reflect the fact that laboratories are not capable of analyzing it. Similarly, for dinitrophenols, only one of the six isomers (2,4-dinitrophenol (CAS Number 51285) is currently certified for analysis under the VELAP accreditation program. They stated that the other dinitrophenol should be removed from the water quality standards, or a statement should be added that 2,4-dinitrophnol results can be used for all six dinitrophenol isomers.	The comments are noted. Bis(chloromethyl) ether is proposed for deletion. Methodology for analysis of dinitrophenol will be addressed through permitting guidance.
Commenter	**Comments – Section 185: Chesapeake Bay Criteria**	
Chesapeake Bay Foundation	They recommend that Virginia adopt recently recommended increases for Submerged Aquatic Vegetation (SAV) acreages in a recent Chesapeake Bay Program technical addendum.	The comment is noted. Updated SAV acreages and corresponding water clarity acreages are being proposed.
Friends of the Rappahannock	They stated that there is a substantial discrepancy between the actual mapped SAV acreages and the current water quality standards as defined in Virginia's regulations. They think the current SAV acreage criteria are too low and this lower bar is inappropriate. Since adoption of the current criteria, SAVs in the mesohaline Rappahannock have rebounded substantively. FOR believes DEQ should raise the standard consistent with the approach used in all other Chesapeake Bay waters.	The comment is noted. Please see above response regarding SAV.
James River Association	JRA supports DEQ's proposed action to revise Virginia's submerged aquatic vegetation (SAV) acreages contained in 9VAC25-260-185 to be consistent with the EPA's most recent assessment recommendations.	The comment is noted. Please see above response regarding SAV.
City of Richmond	They stated their interest in the potential revision of submerged aquatic vegetation acreages for the Chesapeake Bay and its tributaries (9 VAC 25-260-185.B) as these water quality standards form the basis for the inclusion of effluent permit limits which is of particular interest to Richmond Dept. of Public Utilities.	The comment is noted. Please see above response regarding SAV.
Commenter	**Comments – Section 310: Special Standards**	
Chesapeake Bay Foundation	Recommended that Virginia adopt criteria that protect the Shenandoah and other Virginia nontidal waters from filamentous algal blooms and their impacts upon designated uses. They urge DEQ to develop plans to adopt standards across all non-tidal waters where filamentous algae has the potential to degrade designated	The comments are noted. Proposed criteria for filamentous algae have been developed and are proposed for the North Fork Shenandoah, South

	uses. They also recommend the adoption of EPA-recommended criteria for the algal toxins Microcystin and Cylindrospermopsin.	Fork Shenandoah, and mainstem Shenandoah River. Regarding EPA recommended criteria for cyanobacteria, please see above response.
Potomac Riverkeeper Network and Shenandoah Riverkeeper	Stated that the Shenandoah Riverkeeper and PRKN have documented recurring and chronic problems of widespread excessive algal blooms in the North Fork, South Fork and mainstem Shenandoah River that occur spring through the fall due to uncontrolled or poorly controlled nitrogen, phosphorus and sediment entering the river. A benthic chlorophyll-a standard may be insufficient as the sole tool to determine whether the recreational uses of the Shenandoah are being impaired and should be one element of a multi-pronged approach to assessing algae impairment of the Shenandoah River. This should include visual assessment of the spatial degree of algal growth and use of the narrative water quality standards. DEQ should also include an assessment of planktonic algae in the overall approach when making impairment determinations for the river. DEQ should either revise the water quality assessment guidance or develop stand-alone guidance applicable to monitoring for chlorophyll-a in the Shenandoah and other Virginia Rivers to ensure that the water quality assessment methodology is adequate and tailored to assessing algal growth and impairment. The Shenandoah Riverkeeper stated that the North Fork Shenandoah River should be included as an assessed waterway and included in the Clean Water Act Report and on the 303(d) list and have a TMDL developed. They also state that Virginia should adopt criteria for algal toxins such as Mycrocystin and Cylindrospermopsin.	The comments are noted. Please refer to previous responses regarding filamentous algae criteria for the Shenandoah River basin.
Friends of the North Fork of the Shenandoah River	Stated that the North Fork Shenandoah River should be included as an assessed waterway and included in the Clean Water Act Report and on the 303(d) list and have a TMDL developed.	The comment has been noted.
Wild Virginia Protect Our Water Heritage Rights Waterkeepers Chesapeake	They commented that DEQ has so far refused to make impairment findings based on violations of narrative criteria related to excessive algae growth. They stated that DEQ's proposed adoption of a benthic chlorophyll-a criterion to protect the Shenandoah River from excessive filamentous algae growth is appropriate but insufficient to address other types of impairments caused by excessive nutrients. They said that DEQ has failed to honor the public's written statements, photographs, citizen-collected data, and DEQ staff as well as input of other state agencies by not addressing problems with color, turbidity, and odor caused by excessive amounts of nutrients. Also, There is evidence that visual impacts from stream pollution directly affect recreational users and economic interests. They stated there is historical precedent for DEQ to use visual evidence to declare WQS to be violated and to develop regulatory requirements to meet the narrative criteria. They cited an instance from the 1990s when municipal water plants in Eden, North Carolina and Danville, Virginia were forced to stop withdrawing water from the stream and interrupt supplies to homes and businesses due to highly colored	The comments are noted. Please refer to previous responses regarding Shenandoah River basin filamentous algae criteria.

	water in the stream which resulted from upstream wastewater plant discharges that had received large amounts of process wastewater from textile plants. Based on color and its visual impacts on the PWS designated use, DEQ developed VPDES permit limits on color for the contributing wastewater discharges. They stated there is no excuse for continued delay in adopting numeric criteria for both turbidity and nutrients.	
Commenter	**Comments – Section 450: Roanoke River Basin**	
Town of South Hill	They requested the removal of the PWS (Public Water Supply) designation for Flat Creek (a tributary to Lake Gaston) stating the designation is incorrect and unnecessary. They stated the PWS designation causes unnecessary VPDES permitting difficulties for the Town.	The comment is noted. DEQ staff have determined that the PWS designation for Flat Creek is not in error and is part of an extensive PWS designation for the lower Roanoke that serves as a mechanism to protect drinking water supplies for Virginia and North Carolina.

ATTACHMENT 4

State Water Control Board, 9 VAC 25-260 Virginia Water Quality Standards, Triennial Review Proposed Amendments, 2021

9VAC25-260-50. Numerical criteria for dissolved oxygen, pH, and maximum temperature***.

CLASS	DESCRIPTION OF WATERS	DISSOLVED OXYGEN (mg/l)****		pH ****	Max. Temp. (°C)
		Min.	Daily Avg.		
I	Open Ocean	5.0	--	6.0-9.0	--
II	Tidal Waters in the Chowan Basin and the Atlantic Ocean Basin	4.0	5.0	6.0-9.0	--
II	Tidal Waters in the Chesapeake Bay and its tidal tributaries	see 9VAC25-260-185		6.0-9.0	
III	Nontidal Waters (Coastal and Piedmont Zones)	4.0	5.0	6.0-9.0	32
IV	Mountainous Zones Waters	4.0	5.0	6.0-9.0	31
V	Stockable Trout Waters	5.0	6.0	6.0-9.0	21
VI	Natural Trout Waters	6.0	7.0	6.0-9.0	20
VII	Swamp Waters	*	*	3.7-8.0*	**

*This classification recognizes that the natural quality of these waters may fluctuate outside of the values for D.O. and pH set forth above as water quality criteria in Class I through VI waters. The natural quality of these waters is the water quality found or expected in the absence of human-induced pollution. Water quality standards will not be considered violated when conditions are determined by the board to be natural and not due to human-induced sources. The board may develop site specific criteria for Class VII waters that reflect the natural quality of the waterbody when the evidence is sufficient to demonstrate that the site specific criteria rather than narrative criterion will fully protect aquatic life uses. Virginia Pollutant Discharge Elimination System limitations in Class VII waters shall not cause significant changes to the naturally occurring dissolved oxygen and pH fluctuations in these waters.

**Maximum temperature will be the same as that for Classes I through VI waters as appropriate.

***The water quality criteria in this section do not apply below the lowest flow averaged (arithmetic mean) over a period of seven consecutive days that can be statistically expected to occur once every 10 climatic years (a climatic year begins April 1 and ends March 31). See 9VAC25-260-310 and 9VAC25-260-380 through 9VAC25-260-540 for site specific adjustments to these criteria.

****For a thermally stratified man-made lake or reservoir in Class III, IV, V or VI waters that are listed in 9VAC25-260-187, these dissolved oxygen and pH criteria apply only to the epilimnion of the waterbody. When these waters are not stratified, the dissolved oxygen and pH criteria apply throughout the water column.

9VAC25-260-140. Criteria for surface water.

A. Instream water quality conditions shall not be acutely[1] or chronically[2] toxic except as allowed in 9VAC25-260-20 B (mixing zones). The following are definitions of acute and chronic toxicity conditions:

"Acute toxicity" means an adverse effect that usually occurs shortly after exposure to a pollutant. Lethality to an organism is the usual measure of acute toxicity. Where death is not easily detected, immobilization is considered equivalent to death.

"Chronic toxicity" means an adverse effect that is irreversible or progressive or occurs because the rate of injury is greater than the rate of repair during prolonged exposure to a pollutant. This includes low level, long-term effects such as reduction in growth or reproduction.

B. The following table is a list of numerical water quality criteria for specific parameters.

Table of Parameters[6, 7]

PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Acenapthene (µg/l) 83329					70	90
Acrolein (µg/l) 107028	3.0	3.0			3	400
Acrylonitrile (µg/l) 107131 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.61	70
Aldrin (µg/l) 309002 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.	3.0		1.3		0.0000077	0.0000077
Aluminum 7429905 Acute and chronic freshwater aluminum criteria values for a site shall be calculated using the 2018 Aluminum Criteria Calculator (Aluminum Criteria Calculator V.2.0.xlsx), or a calculator in R or other software package using the same 1985 Guidelines calculation approach and underlying model equations as in the Aluminum Criteria Calculator V.2.0.xlsx, as defined in EPA's Final Aquatic Life Ambient Water Quality Criteria for Aluminum. (EPA-822-R-18-001, 2018)	1,300 pH= 7.0 Total hardness (CaCO3) = 25 mg/l DOC = 5.0 mg/l	500 pH= 7.0 Total hardness (CaCO3) = 25 mg/l DOC = 5.0 mg/l				
Ammonia (µg/l) ~~766-41-7~~ 7664417 Chronic criterion is a 30-day average concentration not to be exceeded more than once every three years on the average.(see 9VAC25-260-155)						

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Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Anthracene (µg/l) 120127					300	400
Antimony (µg/l) 7440360					~~5.6~~ 5.3	~~640~~ 580
Arsenic (µg/l)[5] 7440382	340	150	69	36	10	
Bacteria (see 9VAC25-260-160 and 9VAC25-260-170)						
Barium (µg/l) 7440393					2,000	
Benzene (µg/l) 71432 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					5.8	160
Benzidine (µg/l) 92875 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					0.0014	0.11
Benzo (a) anthracene (µg/l) 56553 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					0.012	0.013
Benzo (b) fluoranthene (µg/l) 205992 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					0.012	0.013
Benzo (k) fluoranthene (µg/l) 207089 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					0.12	0.13
Benzo (a) pyrene (µg/l) 50328 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					0.0012	0.0013
Bis2-Chloroethyl Ether (µg/l) 111444 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					0.30	22
~~Bis (chloromethyl) Ether~~ ~~542881~~					~~0.0015~~	~~0.17~~

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
~~Known or suspected carcinogen; human health criteria at risk level 10^{-5}~~						
~~Bis2-Chloroisopropyl Ether (Bis (2-Chloro-1-methylethyl) Ether)~~ 2,2'-Oxybis(1-Chloropropane) (µg/l) 108601					200	4,000
Bis2-Ethylhexyl Phthalate (µg/l) 117817 Known or suspected carcinogen; human health criteria at risk level 10^{-5}. Synonym = Di-2-Ethylhexyl Phthalate.					3.2	3.7
Bromoform (µg/l) 75252 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					70	1,200
Butyl benzyl phthalate (µg/l) 85687					1.0	1.0
Cadmium (µg/l)[5] 7440439 Freshwater values are a function of total hardness as calcium carbonate ($CaCO_3$) mg/l and the WER. The minimum hardness allowed for use in the equation below shall be 25 and the maximum hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion (µg/l) WER $e^{(0.9789[\ln(\text{hardness})]-3.866)}$ (CF_a) Freshwater chronic criterion (µg/l) WER $e^{(0.7977[\ln(\text{hardness})]-3.909)}$ (CF_c) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic)	1.8 $CaCO_3$ = 100	0.72 $CaCO_3$ = 100	33 X WER	7.9 X WER	5	

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Table of Parameters[6, 7]

PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
$CF_a = 1.136672-[(\ln hardness)(0.041838)]$ $CF_c = 1.101672-[(\ln hardness)(0.041838)]$						
Carbon tetrachloride (µg/l) 56235 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					4.0	50
Carbaryl (µg/l) 63252	2.1	2.1	1.6			
Chlordane (µg/l) ~~57749~~ 12789036 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.	2.4	0.0043	0.09	0.0040	0.0031	0.0032
Chloride (µg/l) 16887006 Human health criterion to maintain acceptable taste and aesthetic quality and applies at the drinking water intake. Chloride criteria do not apply in Class II transition zones (see subsection C of this section).	860,000	230,000			250,000	
Chlorine, Total Residual (µg/l) 7782505 In DGIF class i and ii trout waters (9VAC25-260-390 through 9VAC25-260-540) or waters with threatened or endangered species are subject to the halogen ban (9VAC25-260-110).	19 See 9VAC25-260-110	11 See 9VAC25-260-110				
Chlorine Produced Oxidant (µg/l) 7782505			13	7.5		
Chlorobenzene (µg/l) 108907					100	800
Chlorodibromomethane (µg/l) 124481 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					8.0	210
Chloroform (µg/l) 67663					60	2,000
2-Chloronaphthalene (µg/l) 91587					800	1,000

Table of Parameters[6, 7]						
	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
PARAMETER CAS Number	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
2-Chlorophenol (µg/l) 95578					30	800
Chlorpyrifos (µg/l) 2921882	0.083	0.041	0.011	0.0056		
Chromium III (µg/l)[5] 16065831 Freshwater values are a function of total hardness as calcium carbonate $CaCO_3$ mg/l and the WER. The minimum hardness allowed for use in the equation below shall be 25 and the maximum hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion µg/l WER $[e^{\{0.8190[\ln(\text{hardness})]+3.7256\}}]$ (CF_a) Freshwater chronic criterion µg/l WER $[e^{\{0.8190[\ln(\text{hardness})]+0.6848\}}]$ (CF_c) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140.F e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) CF_a= 0.316 CF_c=0.860	570 ($CaCO_3$ = 100)	74 ($CaCO_3$ = 100)			100 (total Cr)	
Chromium VI (µg/l)[5] 18540299	16	11	1,100	50		
Chrysene (µg/l) 218019 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					1.2	1.3
Copper (µg/l)[5] 7440508 Freshwater criteria for copper shall be calculated using the EPA 2007 Biotic Ligand Model (see 9VAC25- 260-140 G) where the Board has determined that a sufficient dataset of input parameters is available. Where the Board has determined that a	13 $CaCO_3$ = 100	9.0 $CaCO_3$ = 100	9.3 X WER	6.0 X WER	1,300	

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Table of Parameters[6, 7]

PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
sufficient dataset is not available, freshwater criteria shall be calculated using the hardness-based equations below. Freshwater values derived using the below equations are a function of total hardness as calcium carbonate $CaCO_3$ mg/l and the WER. The minimum hardness allowed for use in the equation below shall be 25 and the maximum hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion (µg/l) WER [$e^{\{0.9422[\ln(\text{hardness})]-1.700\}}$] ($CF_a$) Freshwater chronic criterion (µg/l) WER [$e^{\{0.8545[\ln(\text{hardness})]-1.702\}}$] ($CF_c$) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F. e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) CF_a = 0.960 CF_c = 0.960 ~~Alternate copper criteria in freshwater: the freshwater criteria for copper can also be calculated using the EPA 2007 Biotic Ligand Model (See 9VAC25-260-140 G).~~ Acute saltwater criterion is a 24-hour average not to be exceeded more than once every three years on the average.						
Cyanide, Free (µg/l) 57125	22	5.2	1.0	1.0	4	400
DDD (µg/l) 72548 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.0012	0.0012

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Table of Parameters[6, 7]						
	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER			
PARAMETER CAS Number	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]	Public Water Supply[3]	All Other Surface Waters[4]
DDE (µg/l) 72559 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.00018	0.00018
DDT (µg/l) 50293 Known or suspected carcinogen; human health criteria at risk level 10^{-5}. Total concentration of DDT and metabolites shall not exceed aquatic life criteria.	1.1	0.0010	0.13	0.0010	0.00030	0.00030
Demeton (µg/l) 8065483		0.1		0.1		
Diazinon (µg/l) 333415	0.17	0.17	0.82	0.82		
Dibenz (a, h) anthracene (µg/l) 53703 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.0012	0.0013
1,2-Dichlorobenzene (µg/l) 95501					1,000	3,000
1,3-Dichlorobenzene (µg/l) 541731					7	10
1,4 Dichlorobenzene (µg/l) 106467					300	900
3,3 Dichlorobenzidine (µg/l) 91941 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.49	1.5
Dichlorobromomethane (µg/l) 75274 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					9.5	270
1,2 Dichloroethane (µg/l) 107062 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					99	6,500
1,1 Dichloroethylene (µg/l) 75354					300	20,000
1,2-trans-dichloroethylene (µg/l) 156605					100	4,000
2,4 Dichlorophenol (µg/l) 120832					10	60

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
2,4 Dichlorophenoxy acetic acid (Chlorophenoxy Herbicide) (2,4-D) (µg/l) 94757					1,300	12,000
1,2-Dichloropropane (µg/l) 78875 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					9.0	310
1,3-Dichloropropene (µg/l) 542756 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					2.7	120
Dieldrin (µg/l) 60571 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.	0.24	0.056	0.71	0.0019	0.000012	0.000012
Diethyl Phthalate (µg/l) 84662					600	600
2,4 Dimethylphenol (µg/l) 105679					100	3,000
Dimethyl Phthalate (µg/l) 131113					2,000	2,000
Di-n-Butyl Phthalate (µg/l) 84742					20	30
2,4 Dinitrophenol (µg/l) 51285					10	300
Dinitrophenols (µg/l) 25550587					10	1,000
2-Methyl-4,6-Dinitrophenol (µg/l) 534521					2	30
2,4 Dinitrotoluene (µg/l) 121142 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.49	17
Dioxin 2, 3, 7, 8-tetrachlorodibenzo-p-dioxin (µg/l) 1746016					~~5.0 E-8~~ 4.6 E-8	~~5.1 E-8~~ 4.7 E-8
1,2-Diphenylhydrazine (µg/l) 122667 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.3	2.0
Dissolved Oxygen (µg/l) (See 9VAC25-260-50)						

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Alpha-Endosulfan (µg/l) 959988 Total concentration alpha and beta-endosulfan shall not exceed aquatic life criteria.	0.22	0.056	0.034	0.0087	20	30
Beta-Endosulfan (µg/l) 33213659 Total concentration alpha and beta-endosulfan shall not exceed aquatic life criteria.	0.22	0.056	0.034	0.0087	20	40
Endosulfan Sulfate (µg/l) 1031078					20	40
Endrin (µg/l) 72208	0.086	0.036	0.037	0.0023	0.03	0.03
Endrin Aldehyde (µg/l) 7421934					1	1
Ethylbenzene (µg/l) 100414					68	130
Fecal Coliform (see 9VAC25-260-160)						
Fluoranthene (µg/l) 206440					20	20
Fluorene (µg/l) 86737					50	70
Foaming Agents (µg/l) Criterion measured as methylene blue active substances. Criterion to maintain acceptable taste, odor, or aesthetic quality of drinking water and applies at the drinking water intake.					500	
Guthion (µg/l) 86500		0.01		0.01		
Heptachlor (µg/l) 76448 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.	0.52	0.0038	0.053	0.0036	0.000059	0.000059
Heptachlor Epoxide (µg/l) 1024573 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.	0.52	0.0038	0.053	0.0036	0.00032	0.00032
Hexachlorobenzene (µg/l) 118741 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.00079	0.00079

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Hexachlorobutadiene (µg/l) 87683 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.1	0.1
Hexachlorocyclohexane Alpha-BHC (µg/l) 319846 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.0036	0.0039
Hexachlorocyclohexane Beta-BHC (µg/l) 319857 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.080	0.14
Hexachlorocyclohexane (µg/l) (Lindane) Gamma-BHC 58899	0.95		0.16		4.2	4.4
Hexachlorocyclohexane (HCH)-Technical (µg/l) 608731 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.066	0.1
Hexachlorocyclopentadiene (µg/l) 77474					4	4
Hexachloroethane (µg/l) 67721 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					1	1
Hydrogen sulfide (µg/l) 7783064		2.0		2.0		
Indeno (1,2,3,-cd) pyrene (µg/l) 193395 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.012	0.013
Iron (µg/l) 7439896 Criterion to maintain acceptable taste, odor, or aesthetic quality of drinking water and applies at the drinking water intake.					300	

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Isophorone (µg/l) 78591 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					340	18,000
Kepone (µg/l) 143500		zero		zero		
Lead (µg/l)[5] 7439921 Freshwater values are a function of total hardness as calcium carbonate $CaCO_3$ mg/l and the water effect ratio. The minimum hardness allowed for use in the equation below shall be 25 and the maximum hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion (µg/l) WER [e $^{\{1.273[\ln(\text{hardness})]-1.084\}}$](CF$_a$) Freshwater chronic criterion (µg/l) WER [e $^{\{1.273[\ln(\text{hardness})]-3.259\}}$] (CF$_c$) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) CF$_a$ = 1.46203-[(ln hardness)(0.145712)] CF$_c$ = 1.46203-[(ln hardness)(0.145712)]	94 $CaCO_3$ = 100	11 $CaCO_3$ = 100	230 X WER	8.8 X WER	15	
Malathion (µg/l) 121755		0.1		0.1		
Mercury (µg/l) 5 7439976	1.4	0.77	1.8	0.94		
Methyl Bromide (µg/l) 74839					100	10,000
3-Methyl-4-Chlorophenol 59507					500	2,000
Methyl Mercury (Fish Tissue Criterion mg/kg) 8. 22967926					0.30	0.30

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Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Methylene Chloride (µg/l) 75092 Known or suspected carcinogen; human health criteria at risk level 10^{-5}. Synonym = Dichloromethane					20	1,000
Methoxychlor (µg/l) 72435		0.03		0.03	0.02	0.02
Mirex (µg/l) 2385855		zero		zero		
Nickel (µg/l)[5] ~~744002~~ 7440020 Freshwater values are a function of total hardness as calcium carbonate $CaCO_3$ mg/l and the WER. The minimum hardness allowed for use in the equation below shall be 25 and the maximum hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion (µg/l) WER $[e^{\{0.8460[\ln(\text{hardness})] + 1.312\}}]$ (CF_a) Freshwater chronic criterion (µg/l) WER $[e^{\{0.8460[\ln(\text{hardness})] - 0.8840\}}]$ (CF_c) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) $CF_a = 0.998$ $CF_c = 0.997$	180 $CaCO_3$ = 100	20 $CaCO_3$ = 100	74 X WER	8.2 X WER	~~610~~ 470	~~4,600~~ 1,500
Nitrate as N (µg/l) 14797558					10,000	
Nitrobenzene (µg/l) 98953					10	600
N-Nitrosodimethylamine (µg/l) 62759 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					~~0.0069~~ 0.0065	~~30~~ 27

Table of Parameters[6, 7]						
	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
PARAMETER CAS Number	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
N-Nitrosodiphenylamine (µg/l) 86306 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					~~33~~ 30	~~60~~ 55
N-Nitrosodi-n-propylamine (µg/l) 621647 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					~~0.050~~ 0.047	~~5.1~~ 4.6
Nonylphenol (µg/l) 84852153	28	6.6	7.0	1.7		
Parathion (µg/l) 56382	0.065	0.013				
PCB Total (µg/l) 1336363 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.		0.014		0.030	~~0.00064~~ 0.00058	~~0.00064~~ 0.00058
Pentachlorobenzene (µg/l) 608935					0.1	0.1
Pentachlorophenol (µg/l) 87865 Known or suspected carcinogen; human health criteria risk level at 10^{-5}. Freshwater acute criterion (µg/l) $e^{(1.005(pH)-4.869)}$ Freshwater chronic criterion (µg/l) $e^{(1.005(pH)-5.134)}$	8.7 pH = 7.0	6.7 pH = 7.0	13	7.9	0.3	0.4
pH See 9VAC25-260-50						
Phenol (µg/l) 108952					4,000	300,000
Phosphorus Elemental (µg/l) 7723140				0.10		
Pyrene (µg/l) 129000					20	30
Radionuclides Gross Alpha Particle Activity (pCi/L) Beta Particle & Photon Activity (mrem/yr) (formerly man-made radionuclides) Combined Radium 226 and 228 (pCi/L)					15 4 5	

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Uranium (µg/L) 7440611					30	
Selenium (µg/l)[5] 7782492 WER shall not be used for freshwater acute and chronic criteria. Freshwater criteria expressed as total recoverable.	20	5.0	290 X WER	71 X WER	~~170~~ 160	~~4,200~~ 3,800
Silver (µg/l)[5] 7440224 Freshwater values are a function of total hardness as calcium carbonate ($CaCO_3$) mg/l and the WER. The minimum hardness allowed for use in the equation below shall be 25 and the maximum hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion (µg/l) WER [$e^{\{1.72[\ln(\text{hardness})]-6.52\}}$] ($CF_a$) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) CF_a = 0.85	3.4; $CaCO_3$ = 100		1.9 X WER			
Sulfate (µg/l) Criterion to maintain acceptable taste, odor, or aesthetic quality of drinking water and applies at the drinking water intake.					250,000	
Temperature See 9VAC25-260-50						
1,2,4,5-Tetrachlorobenzene 95943					0.03	0.03
1,1,2,2-Tetrachloroethane (µg/l) 79345 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					2.0	30
Tetrachloroethylene (µg/l) 127184					100	290

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Known or suspected carcinogen; human health criteria at risk level 10^{-5}.						
Thallium (µg/l) 7440280					~~0.24~~ 0.22	~~0.47~~ 0.43
Toluene (µg/l) 108883					57	520
Total Dissolved Solids (µg/l) Criterion to maintain acceptable taste, odor or aesthetic quality of drinking water and applies at the drinking water intake.					500,000	
Toxaphene (µg/l) 8001352 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.	0.73	0.0002	0.21	0.0002	0.0070	0.0071
Tributyltin (µg/l) ~~60105~~ E1790678	0.46	0.072	0.42	0.0074		
1, 2, 4 Trichlorobenzene (µg/l) 120821 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.71	0.76
1,1,1-Trichloroethane 71556					10,000	200,000
1,1,2-Trichloroethane (µg/l) 79005 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					5.5	89
Trichloroethylene (µg/l) 79016 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					6.0	70
2, 4, 5 –Trichlorophenol 95954					300	600
2, 4, 6-Trichlorophenol (µg/l) 88062 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					15	28
2-(2, 4, 5-Trichlorophenoxy) propionic acid (Silvex) (µg/l) 93721					100	400
Vinyl Chloride (µg/l) 75014					0.22	16

Table of Parameters[6, 7]

PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Known or suspected carcinogen; human health criteria at risk level 10^{-5}.						
Zinc (µg/l)[5] 7440666 Freshwater values are a function of total hardness as calcium carbonate ($CaCO_3$) mg/l and the WER. The minimum hardness allowed for use in the equation below shall be 25 and the maximum, hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion (µg/l) WER $[e^{\{0.8473[\ln(\text{hardness})]+0.884\}}](CF_a)$ Freshwater chronic criterion (µg/l) WER $[e^{\{0.8473[\ln(\text{hardness})]+0.884\}}]$ (CF_c) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) $CF_a = 0.978$ $CF_c = 0.986$	120 $CaCO_3$ = 100	120 $CaCO_3$ = 100	90 X WER	81 X WER	~~7,400~~ 7,000	~~26,000~~ 23,000

[1]One hour average concentration not to be exceeded more than once every 3 years on the average, unless otherwise noted.
[2]Four-day average concentration not to be exceeded more than once every 3 years on the average, unless otherwise noted.
[3]Criteria have been calculated to protect human health from toxic effects through drinking water and fish consumption, unless otherwise noted and apply in segments designated as PWS in 9VAC25-260-390 through 9VAC25-260-540. Human health criteria are based on the assumption of average amount of exposure on a long-term basis.
[4]Criteria have been calculated to protect human health from toxic effects through fish consumption, unless otherwise noted and apply in all other surface waters not designated as PWS in 9VAC25-260-390 through 9VAC25-260-540. Human health criteria are based on the assumption of average amount of exposure on a long-term basis.
[5]Acute and chronic saltwater and freshwater aquatic life criteria apply to the biologically available form of the metal and apply as a function of the pollutant's water effect ratio (WER) as defined in 9VAC25-260-140 F (WER X criterion). Metals measured as dissolved shall be considered to be biologically available, or, because local receiving water characteristics may otherwise affect the biological availability of the metal, the biologically available equivalent measurement of the metal can be further defined by determining a water effect ratio (WER) and multiplying the numerical value shown in 9VAC25-260-140 B by the WER. Refer to 9VAC25-260-140 F. Values displayed above in the table are examples and correspond to a WER of 1.0. Metals criteria have been adjusted to convert the total recoverable fraction to dissolved fraction using a conversion factor. Criteria that change with hardness have the conversion factor listed in the table above.

Table of Parameters[6, 7]						
	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
PARAMETER CAS Number	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		

[6]The flows listed below are default design flows for calculating steady state wasteload allocations unless statistically valid methods are employed which demonstrate compliance with the duration and return frequency of the water quality criteria.

Aquatic Life:

Acute criteria	1Q10
Chronic criteria	7Q10
Chronic criteria (ammonia)	30Q10

Human Health:

Noncarcinogens	30Q5
Carcinogens	Harmonic mean

The following are defined for this section:

"1Q10" means the lowest flow averaged over a period of 1 day which on a statistical basis can be expected to occur once every 10 climatic years.

"7Q10" means the lowest flow averaged over a period of 7 consecutive days that can be statistically expected to occur once every 10 climatic years.

"30Q5" means the lowest flow averaged over a period of 30 consecutive days that can be statistically expected to occur once every 5 climatic years.

"30Q10" means the lowest flow averaged over a period of 30 consecutive days that can be statistically expected to occur once every 10 climatic years.

"Averaged" means an arithmetic mean.

"Climatic year" means a year beginning on April 1 and ending on March 31.

[7]The criteria listed in this table are two significant digits. For other criteria that are referenced to other sections of this regulation in this table, all numbers listed as criteria values are significant.

[8]The fish tissue criterion for methylmercury applies to a concentration of 0.30 mg/kg as wet weight in edible tissue for species of fish and shellfish resident in a waterbody that are commonly eaten in the area and have commercial, recreational, or subsistence value.

C. Application of freshwater and saltwater numerical criteria. The numerical water quality criteria listed in subsection B of this section (excluding dissolved oxygen, pH, temperature) shall be applied according to the following classes of waters (see 9VAC25-260-50) and boundary designations:

CLASS OF WATERS	NUMERICAL CRITERIA
I and II (Estuarine Waters)	Saltwater criteria apply
II (Transition Zone)	More stringent of either the freshwater or saltwater criteria apply
II (Tidal Freshwater), III, IV, V, VI and VII	Freshwater criteria apply

The following describes the boundary designations for Class II, (estuarine, transition zone and tidal freshwater waters) by river basin:

1. Rappahannock Basin. Tidal freshwater is from the fall line of the Rappahannock River to the upstream boundary of the transition zone including all tidal tributaries that enter the tidal freshwater Rappahannock River.

Transition zone upstream boundary – N38° 4' 56.59"/W76° 58' 47.93" (430 feet east of Hutchinson Swamp) to N38° 5' 23.33"/W76° 58' 24.39" (0.7 miles upstream of Peedee Creek).

Transition zone downstream boundary – N37° 58' 45.80"/W76° 55' 28.75" (1,000 feet downstream of Jenkins Landing) to N37° 59' 20.07/W76° 53' 45.09" (0.33 miles upstream of Mulberry Point). All tidal waters that enter the transition zone are themselves transition zone waters.

Estuarine waters are from the downstream boundary of the transition zone to the mouth of the Rappahannock River (Buoy 6), including all tidal tributaries that enter the estuarine waters of the Rappahannock River.

2. York Basin. Tidal freshwater is from the fall line of the Mattaponi River at N37° 47' 20.03"/W77° 6' 15.16" (800 feet upstream of the Route 360 bridge in Aylett) to the upstream boundary of the Mattaponi River transition zone, and from the fall line of the Pamunkey River at N37° 41' 22.64"/W77° 12' 50.83" (2,000 feet upstream of Totopotomy Creek) to the upstream boundary of the Pamunkey River transition zone, including all tidal tributaries that enter the tidal freshwaters of the Mattaponi and Pamunkey Rivers.

Mattaponi River transition zone upstream boundary – N37° 39' 29.65"/W76° 52' 53.29" (1,000 feet upstream of Mitchell Hill Creek) to N37° 39' 24.20"/W76° 52' 55.87" (across from Courthouse Landing).

Mattaponi River transition zone downstream boundary – N37° 32' 19.76"/W76° 47' 29.41" (old Lord Delaware Bridge, west side) to N37° 32' 13.25"/W76° 47' 10.30" (old Lord Delaware Bridge, east side).

Pamunkey River transition zone upstream boundary – N37° 32' 36.63"/W76° 58' 29.88" (Cohoke Marsh, 0.9 miles upstream of Turkey Creek) to N37° 32' 36.51"/W76° 58' 36.48" (0.75 miles upstream of creek at Cook Landing).

Pamunkey River transition zone downstream boundary – N37° 31' 57.90"/W76° 48' 38.22" (old Eltham Bridge, west side) to N37° 32' 6.25"/W76° 48' 18.82" (old Eltham Bridge, east side).

All tidal tributaries that enter the transition zones of the Mattaponi and Pamunkey Rivers are themselves in the transition zone.

Estuarine waters are from the downstream boundary of the transition zones of the Mattaponi and Pamunkey Rivers to the mouth of the York River (Tue Marsh Light) including all tidal tributaries that enter the estuarine waters of the York River.

3. James Basin. Tidal freshwater is from the fall line of the James River in the City of Richmond upstream of Mayo Bridge to the upstream boundary of the transition zone, including all tidal tributaries that enter the tidal freshwater James River.

James River transition zone upstream boundary – N37° 14' 28.25"/W76° 56' 44.47" (at Tettington) to N37° 13' 38.56"/W76° 56' 47.13" (0.3 miles downstream of Sloop Point).

Chickahominy River transition zone upstream boundary – N37° 25' 44.79"/W77° 1' 41.76" (Holly Landing).

Transition zone downstream boundary – N37° 12' 7.23"/W76° 37' 34.70" (near Carters Grove Home, 1.25 miles downstream of Grove Creek) to N37° 9' 17.23"/W76° 40' 13.45" (0.7 miles upstream of Hunnicutt Creek). All tidal waters that enter the transition zone are themselves transition zone waters.

Estuarine waters are from the downstream transition zone boundary to the mouth of the James River (Buoy 25) including all tidal tributaries that enter the estuarine waters of the James River.

4. Potomac Basin. Tidal freshwater includes all tidal tributaries that enter the Potomac River from its fall line at the Chain Bridge (N38° 55' 46.28"/W77° 6' 59.23") to the upstream transition zone boundary near Quantico, Virginia.

Transition zone includes all tidal tributaries that enter the Potomac River from N38° 31' 27.05"/W77° 17' 7.06" (midway between Shipping Point and Quantico Pier) to N38° 23' 22.78"/W77° 1' 45.50" (one mile southeast of Mathias Point).

Estuarine waters includes all tidal tributaries that enter the Potomac River from the downstream transition zone boundary to the mouth of the Potomac River (Buoy 44B).

5. Chesapeake Bay, Atlantic Ocean, and small coastal basins. Estuarine waters include the Atlantic Ocean tidal tributaries, and the Chesapeake Bay and its small coastal basins from the Virginia state line to the mouth of the bay (a line from Cape Henry drawn through Buoys 3 and 8 to Fishermans Island), and its tidal tributaries, excluding the Potomac tributaries and those tributaries listed in subdivisions 1 through 4 of this subsection.

6. Chowan River Basin. Tidal freshwater includes the Northwest River and its tidal tributaries from the Virginia-North Carolina state line to the free flowing portion, the Blackwater River and its tidal tributaries from the Virginia-North Carolina state line to the end of tidal waters at approximately state route 611 at river mile 20.90, the Nottoway River and its tidal tributaries from the Virginia-North Carolina state line to the end of tidal waters at approximately Route 674, and the North Landing River and its tidal tributaries from the Virginia-North Carolina state line to the Great Bridge Lock.

Transition zone includes Back Bay and its tributaries in the City of Virginia Beach to the Virginia-North Carolina state line.

D. Site-specific modifications to numerical water quality criteria.

1. The board may consider site-specific modifications to numerical water quality criteria in subsection B of this section where the applicant or permittee demonstrates that the alternate numerical water quality criteria are sufficient to protect all designated uses (see 9VAC25-260-10) of that particular surface water segment or body.

2. Any demonstration for site-specific human health criteria shall be restricted to a reevaluation of the bioconcentration or bioaccumulation properties of the pollutant. The exceptions to this restriction are for site-specific criteria for taste, odor, and aesthetic compounds noted by double asterisks in subsection B of this section and nitrates.

3. Procedures for promulgation and review of site-specific modifications to numerical water quality criteria resulting from subdivisions 1 and 2 of this subsection.

a. Proposals describing the details of the site-specific study shall be submitted to the board's staff for approval prior to commencing the study.

b. Any site-specific modification shall be promulgated as a regulation in accordance with the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia). All site-specific modifications shall be listed in 9VAC25-260-310 (Special standards and requirements).

E. Variances to water quality standards.

1. A variance from numeric criteria may be granted to a discharger if it can be demonstrated that one or more of the conditions in 9VAC25-260-10 H limit the attainment of one or more specific designated uses.

a. Variances shall apply only to the discharger to whom they are granted and shall be reevaluated and either continued, modified, or revoked at the time of permit issuance. At that time the permittee shall make a showing that the conditions for granting the variance still apply.

b. Variances shall be described in the public notice published for the permit. The decision to approve a variance shall be subject to the public participation requirements of the Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation, 9VAC25-31.
c. Variances shall not prevent the maintenance and protection of existing uses or exempt the discharger or regulated activity from compliance with other appropriate technology or water quality-based limits or best management practices.

d. Variances granted under this section shall not apply to new discharges.

e. Variances shall be submitted by the department's Division of Scientific Research or its successors to the U.S. Environmental Protection Agency for review and approval or disapproval.

f. A list of variances granted shall be maintained by the department's Division of Scientific Research or its successors.

2. None of the variances in this subsection shall apply to the halogen ban section (9VAC25-260-110) or temperature criteria in 9VAC25-260-50 if superseded by § 316(a) of the Clean Water Act requirements. No variances in this subsection shall apply to the criteria that are designed to protect human health from carcinogenic and noncarcinogenic toxic effects (subsection B of this section) with the exception of the metals, and the taste, odor, and aesthetic compounds noted by double asterisks and nitrates, listed in subsection B of this section.

F. Water effect ratio.

1. A water effects ratio (WER) shall be determined by measuring the effect of receiving water (as it is or will be affected by any discharges) on the bioavailability or toxicity of a metal by using standard test organisms and a metal to conduct toxicity tests simultaneously in receiving water and laboratory water. The ratio of toxicities of the metals in the two waters is the WER (toxicity in receiving water divided by toxicity in laboratory water equals WER). Once an acceptable WER for a metal is established, the numerical value for the metal in subsection B of this section is multiplied by the WER to produce an instream concentration that will protect designated uses. This instream concentration shall be utilized in permitting decisions.

2. The WER shall be assigned a value of 1.0 unless the applicant or permittee demonstrates to the department's satisfaction in a permit proceeding that another value is appropriate, or unless available data allow the department to compute a WER for the receiving waters. The applicant or permittee is responsible for proposing and conducting the study to develop a WER. The study may require multiple testing over several seasons. The applicant or permittee shall obtain the department's Division of Scientific Research or its successor approval of the study protocol and the final WER.

3. 9VAC25-31-230 C requires that permit limits for metals be expressed as total recoverable measurements. To that end, the study used to establish the WER may be based on total recoverable measurements of the metals.
4. The WER is established in a permit proceeding, shall be described in the public notice associated with the permit proceeding, and applies only to the applicant or permittee in that proceeding. The department's action to approve or disapprove a WER is a case decision, not an amendment to the present regulation.

The decision to approve or disapprove a WER shall be subject to the public participation requirements of Virginia Pollutant Discharge Elimination System (VPDES) Regulation, Part IV (9VAC25-31-260 et seq.). A list of final WERs will be maintained by the department's Division of Scientific Research or its successor.
5. A WER shall not be used for the freshwater and saltwater chronic mercury criteria or the freshwater acute and chronic selenium criteria.

G. Biotic Ligand Model for copper. ~~On a case-by-case basis~~ Where the Board determines that a sufficient dataset of input parameters is available, EPA's 2007 copper criteria (EPA-822-F-07-001) biotic ligand model (BLM) for copper ~~may~~ shall be used to determine ~~alternate~~ the applicable copper criteria for freshwater sites. The BLM is a bioavailability model that uses receiving water characteristics to develop site-specific criteria. Site-specific data for 10 parameters are needed to use the BLM. These parameters are temperature, pH, dissolved organic carbon, calcium, magnesium, sodium, potassium, sulfate, chloride, and alkalinity. ~~If sufficient data for these parameters are available, the BLM can be used to calculate alternate criteria values for the copper criteria.~~ Where the Board determines that a sufficient dataset of input parameters is available, ~~The~~ the BLM ~~would~~ shall be used instead of the hardness-based criteria and takes the place of the hardness adjustment and the WER. A WER will not be applicable with the BLM.

The BLM would be used instead of the hardness-based criteria and takes the place of the hardness adjustment and the WER. A WER will not be applicable with the BLM.

9VAC25-260-185. Criteria to protect designated uses from the impacts of nutrients and suspended sediment in the Chesapeake Bay and its tidal tributaries.

A. Dissolved oxygen. The dissolved oxygen criteria in the following table apply to all Chesapeake Bay waters according to their specified designated use and supersede the dissolved oxygen criteria in 9VAC25-260-50.

Designated Use	Criteria Concentration/Duration	Temporal Application
Migratory fish spawning and nursery	7-day mean ≥ 6 mg/l (tidal habitats with 0-0.5 ppt salinity)	February 1 - May 31
	Instantaneous minimum ≥ 5 mg/l	
Open water[1]	30-day mean ≥ 5.5 mg/l (tidal habitats with 0-0.5 ppt salinity)	year-round[2]
	30-day mean ≥ 5 mg/l (tidal habitats with > 0.5 ppt salinity)	
	7-day mean ≥ 4 mg/l	
	Instantaneous minimum ≥ 3.2 mg/l at temperatures < 29°C Instantaneous minimum ≥ 4.3 mg/l at temperatures ≥ 29°C	
Deep water	30-day mean ≥ 3 mg/l	June 1 - September 30
	1-day mean ≥ 2.3 mg/l	
	Instantaneous minimum ≥ 1.7 mg/l	
Deep channel	Instantaneous minimum ≥ 1 mg/l	June 1 - September 30

[1]In 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 9VAC25-260-30 A 2.

[2]Open-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 (SAV) 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 submerged aquatic vegetation use	CB5MH	7,633	22%	14,514	April 1 - October 31
	CB6PH	1,267	22%	3,168	March 1 - November 30
	CB7PH	15,107	22%	34,085	March 1 - November 30
	CB8PH	11	22%	28	March 1 - November 30
	POTTF	2,093	13%	5,233	April 1 - October 31
	POTOH	1,503	13%	3,758	April 1 - October 31
	POTMH	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~~ 5,380	22%	~~5000~~ 13,450	April 1 - October 31
	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
	MOBPH	15,901	22%	33,990	March 1 - November 30
	JMSTF2	~~200~~ 266	13%	~~500~~ 665	April 1 - October 31
	JMSTF1	~~1000~~ 1,333	13%	~~2500~~ 3,332	April 1 - October 31
	APPTF	379	13%	948	April 1 - October 31
	JMSOH	15	13%	38	April 1 - October 31

///

CHKOH	535	13%	1,338	April 1 - October 31
JMSMH	~~200~~ 531	22%	~~500~~ 1,328	April 1 - October 31
JMSPH	~~300~~ 604	22%	~~750~~ 1,510	March 1 - November 30
WBEMH	-	-	-	-
SBEMH	-	-	-	-
EBEMH	-	-	-	-
ELIPH	-	-	-	-
LYNPH	107	22%	268	March 1 - November 30
POCOH	-	-	-	-
POCMH	4,066	22%	9,368	April 1 - October 31
TANMH	13,579	22%	22,064	April 1 - October 31

[1]The 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 shall be used.

[2]Percent light-through-water = $100e^{(-KdZ)}$ 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.

Designated Use	Chlorophyll a Narrative Criterion	Temporal 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

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

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 in the following table 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	MOBPH
Western Lower Chesapeake Bay	CB6PH	Upper Tidal Fresh James River	JMSTF2
Eastern Lower Chesapeake Bay	CB7PH	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	POTOH	Chickahominy River	CHKOH
Lower Potomac River	POTMH	Lower James River	JMSMH
Upper Rappahannock River	RPPTF	Mouth of the James River	JMSPH
Middle Rappahannock River	RPPOH	Western Branch Elizabeth River	WBEMH
Lower Rappahannock 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
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		

[1]First 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 data assessment window shall be used.

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), 2007 (CBP/TRS 285/07, EPA 903-R-07-003), 2007 (CBP/TRS 288/07, EPA 903-R-07-005), 2008 (CBP/TRS 290-08, EPA 903-R-08-001), 2010 (CBP/TRS 301-10, EPA 903-R-10-002), and 2017 (CBP/TRS 320-17, EPA 903-R-17-002) addenda. An exception to this requirement is in measuring attainment of the SAV and water clarity acres, which are compared directly to the criteria.

9VAC25-260-187. Criteria for man-made lakes and reservoirs to protect aquatic life and recreational designated uses from the impacts of nutrients.

A. The criteria in subsection B of this section apply to the man-made lakes and reservoirs listed in this section. Additional man-made lakes and reservoirs may be added as new reservoirs are constructed or monitoring data become available from outside groups or future agency monitoring.

B. Whether or not algicide treatments are used, the chlorophyll a criteria apply to all waters on the list. The total phosphorus criteria apply only if a specific man-made lake or reservoir received algicide treatment during the monitoring and assessment period of April 1 through October 31.

The 90th percentile of the chlorophyll a data collected at one meter or less within the lacustrine portion of the man-made lake or reservoir between April 1 and October 31 shall not exceed the chlorophyll a criterion for that waterbody in each of the two most recent monitoring years that chlorophyll a data are available. For a waterbody that received algicide treatment, the median of the total phosphorus data collected at one meter or less within the lacustrine portion of the man-made lake or reservoir between April 1 and October 31 shall not exceed the total phosphorus criterion in each of the two most recent monitoring years that total phosphorus data are available.

Monitoring data used for assessment shall be from sampling location(s) within the lacustrine portion where observations are evenly distributed over the seven months from April 1 through October 31 and are in locations that are representative, either individually or collectively, of the condition of the man-made lake or reservoir.

Man-made Lake or Reservoir Name	Location	Chlorophyll a (µg/L)	Total Phosphorus (µg/L)
Abel Lake	Stafford County	35	40
Airfield Pond	Sussex County	35	40
Amelia Lake	Amelia County	35	40
Aquia Reservoir (Smith Lake)	Stafford County	35	40
Bark Camp Lake (Corder Bottom Lake, Lee/Scott/Wise Lake)	Scott County	35	40
Beaver Creek Reservoir	Albemarle County	35	40

Beaverdam Creek Reservoir (Beaverdam Reservoir)	Bedford County	35	40
Beaverdam Reservoir	Loudoun County	35	40
Bedford Reservoir (Stony Creek Reservoir)	Bedford County	35	40
Big Cherry Lake	Wise County	35	40
Breckenridge Reservoir	Prince William County	35	40
Briery Creek Lake	Prince Edward County	35	40
Brunswick Lake (County Pond)	Brunswick County	35	40
Burke Lake	Fairfax County	60	40
Carvin Cove Reservoir	Botetourt County	35	40
Cherrystone Reservoir	Pittsylvania County	35	40
Chickahominy Lake	Charles City County	35	40
Chris Green Lake	Albemarle County	35	40
Claytor Lake	Pulaski County	25	20
Clifton Forge Reservoir (Smith Creek Reservoir)	Alleghany County	35	20
Coles Run Reservoir	Augusta County	10	10
Curtis Lake	Stafford County	60	40
Diascund Creek Reservoir	New Kent County	35	40
Douthat Lake	Bath County	25	20
Elkhorn Lake	Augusta County	10	10
Emporia Lake (Meherrin Reservoir)	Greensville County	35	40
Fairystone Lake	Henry County	35	40
Falling Creek Reservoir	Chesterfield County	35	40
Fluvanna Ruritan Lake	Fluvanna County	60	40
Fort Pickett Reservoir	Nottoway/Brunswick County	35	40
Gatewood Reservoir	Pulaski County	35	40
Georges Creek Reservoir	Pittsylvania County	35	40
Goose Creek Reservoir	Loudoun County	35	40

Graham Creek Reservoir	Amherst County	35	40
Great Creek Reservoir	Lawrenceville	35	40
Harrison Lake	Charles City County	35	40
Harwood Mills Reservoir	York County	60	40
Hidden Valley Lake	Washington County	35	40
Hogan Lake	Pulaski County	35	40
Holiday Lake	Appomattox County	35	40
Hungry Mother Lake	Smyth County	35	40
Hunting Run Reservoir	Spotsylvania County	35	40
J. W. Flannagan Reservoir	Dickenson County	25	20
Kerr Reservoir, Virginia portion (Buggs Island Lake)	Halifax County	25	30
Keysville Reservoir	Charlotte County	35	40
Lake Albemarle	Albemarle County	35	40
Lake Anna	Louisa County	25	30
Lake Arrowhead	Page County	35	40
Lake Burnt Mills	Isle of Wight County	60	40
Lake Chesdin	Chesterfield County	35	40
Lake Cohoon	Suffolk City	60	40
Lake Conner	Halifax County	35	40
Lake Frederick	Frederick County	35	40
Lake Gaston, (Virginia portion)	Brunswick County	25	30
Lake Gordon	Mecklenburg County	35	40
Lake Keokee	Lee County	35	40
Lake Kilby	Suffolk City	60	40
Lake Lawson	Virginia Beach City	60	40
Lake Manassas	Prince William County	35	40
Lake Meade	Suffolk City	60	40

Lake Moomaw	Bath County	10	10
Lake Mooney	Stafford County	25	40
Lake Nelson	Nelson County	60	40
Lake Nottoway (Lee Lake, Nottoway Lake)	Nottoway County	35	40
Lake Orange	Orange County	60	40
Lake Pelham	Culpeper County	35	40
Lake Prince	Suffolk City	60	40
Lake Robertson	Rockbridge County	35	40
Lake Smith	Virginia Beach City	60	40
Lake Whitehurst	Norfolk City	60	40
Lake Wright	Norfolk City	60	40
Lakeview Reservoir	Chesterfield County	35	40
Laurel Bed Lake	Russell County	35	40
Lee Hall Reservoir (Newport News Reservoir)	Newport News City	60	40
Leesville Reservoir	Bedford County	25	30
Little Creek Reservoir	Virginia Beach City	60	40
Little Creek Reservoir	James City County	25	30
Little River Reservoir	Montgomery County	35	40
Lone Star Lake F (Crystal Lake)	Suffolk City	60	40
Lone Star Lake G (Crane Lake)	Suffolk City	60	40
Lone Star Lake I (Butler Lake)	Suffolk City	60	40
Lunga Reservoir	Prince William County	35	40
Lunenburg Beach Lake (Victoria Lake)	Town of Victoria	35	40
Martinsville Reservoir (Beaver Creek Reservoir)	Henry County	35	40
Mill Creek Reservoir	Amherst County	35	40
Modest Creek Reservoir	Town of Victoria	35	40

Motts Run Reservoir	Spotsylvania County	25	30
Mount Jackson Reservoir	Shenandoah County	35	40
Mountain Run Lake	Culpeper County	35	40
Ni Reservoir	Spotsylvania County	35	40
North Fork Pound Reservoir	Wise County	35	40
Northeast Creek Reservoir	Louisa County	35	40
Occoquan Reservoir	Fairfax County	35	40
Pedlar Lake	Amherst County	25	20
Philpott Reservoir	Henry County	25	30
Phelps Creek Reservoir (Brookneal Reservoir)	Campbell County	35	40
Powhatan Lakes (Upper and Lower)	Powhatan County	35	40
Ragged Mountain Reservoir	Albemarle County	35	40
Rivanna Reservoir (South Fork Rivanna Reservoir)	Albemarle County	35	40
Roaring Fork	Pittsylvania County	35	40
Rural Retreat Lake	Wythe County	35	40
Sandy River Reservoir	Prince Edward County	35	40
Shenandoah Lake	Rockingham County	35	40
Silver Lake	Rockingham County	35	40
Smith Mountain Lake	Bedford County	25	30
South Holston Reservoir	Washington County	25	20
Speights Run Lake	Suffolk City	60	40
Spring Hollow Reservoir	Roanoke County	25	20
Staunton Dam Lake	Augusta County	35	40
Stonehouse Creek Reservoir	Amherst County	60	40
Strasburg Reservoir	Shenandoah County	35	40
Stumpy Lake	Virginia Beach	60	40
Sugar Hollow Reservoir	Albemarle County	25	20

Swift Creek Lake	Chesterfield County	35	40
Swift Creek Reservoir	Chesterfield County	35	40
Switzer Lake	Rockingham County	10	10
Talbott Reservoir	Patrick County	35	40
Thrashers Creek Reservoir	Amherst County	35	40
Totier Creek Reservoir	Albemarle County	35	40
Townes Reservoir	Patrick County	25	20
Troublesome Creek Reservoir	Buckingham County	35	40
Waller Mill Reservoir	York County	25	30
Western Branch Reservoir	Suffolk City	25	20
Wise Reservoir	Wise County	25	20

C. When the board determines that the applicable criteria in subsection B of this section for a specific man-made lake or reservoir are exceeded, the board shall consult with the Department of Game and Inland Fisheries regarding the status of the fishery in determining whether or not the designated use for that waterbody is being attained. If the designated use of the subject waterbody is not being attained, the board shall assess the waterbody as impaired in accordance with § 62.1-44.19:5 of the Code of Virginia. If the designated use is being attained, the board shall assess the waterbody as impaired in accordance with § 62.1-44.19:5 of the Code of Virginia until site-specific criteria are adopted and become effective for that waterbody.

D. If the nutrient criteria specified for a man-made lake or reservoir in subsection B of this section do not provide for the attainment and maintenance of the water quality standards of downstream waters as required in 9VAC25-260-10 C, the nutrient criteria herein may be modified on a site-specific basis to protect the water quality standards of downstream waters.

9VAC25-260-310. Special standards and requirements.

The special standards are shown in small letters to correspond to lettering in the basin tables. The special standards are as follows:

a. Shellfish waters. In all open ocean or estuarine waters capable of propagating shellfish or in specific areas where public or leased private shellfish beds are present, including those waters on which condemnation classifications are established by the Virginia Department of Health, the following criteria for fecal coliform bacteria will apply:

The geometric mean fecal coliform value for a sampling station shall not exceed an MPN (most probable number) or MF (membrane filtration using mTEC culture media) of 14 per 100 milliliters (ml) of sample and the estimated 90th percentile shall not exceed an MPN of 43 per 100 ml for a 5-tube decimal dilution test or an MPN of 49 per 100 ml for a 3-tube decimal dilution test or MF test of 31 CFU (colony forming units) per 100 ml.

The shellfish area is not to be so contaminated by radionuclides, pesticides, herbicides, or fecal material that the consumption of shellfish might be hazardous.

b. Policy for the Potomac Embayments. At its meeting on September 12, 1996, the board adopted a policy (9VAC25-415. Policy for the Potomac Embayments) to control point source discharges of conventional pollutants into the Virginia embayment waters of the Potomac River, and their

tributaries, from the fall line at Chain Bridge in Arlington County to the Route 301 bridge in King George County. The policy sets effluent limits for BOD_5, total suspended solids, phosphorus, and ammonia, to protect the water quality of these high profile waterbodies.

c. Canceled.

d. Canceled.

e. Canceled.

f. Canceled.

g. Occoquan watershed policy. At its meeting on July 26, 1971 (Minute 10), the board adopted a comprehensive pollution abatement and water quality management policy for the Occoquan watershed. The policy set stringent treatment and discharge requirements in order to improve and protect water quality, particularly since the waters are an important water supply for Northern Virginia. Following a public hearing on November 20, 1980, the board, at its December 10-12, 1980, meeting, adopted as of February 1, 1981, revisions to this policy (Minute 20). These revisions became effective March 4, 1981. Additional amendments were made following a public hearing on August 22, 1990, and adopted by the board at its September 24, 1990, meeting (Minute 24) and became effective on December 5, 1990. Copies are available upon request from the Department of Environmental Quality.

h. Canceled.

i. Canceled.

j. Canceled.

k. Canceled.

l. Canceled.

m. The following effluent limitations apply to wastewater treatment facilities treating an organic nutrient source in the entire Chickahominy watershed above Walker's Dam (this excludes discharges consisting solely of stormwater):

CONSTITUENT	CONCENTRATION
1. Biochemical oxygen demand 5-day	6 mg/l monthly average, with not more than 5% of individual samples to exceed 8 mg/l.
2. Settleable solids	Not to exceed 0.1 ml/l monthly average.
3. Suspended solids	5.0 mg/l monthly average, with not more than 5% of individual samples to exceed 7.5 mg/l.
4. Ammonia nitrogen	Not to exceed 2.0 mg/l monthly average as N.
5. Total phosphorus	Not to exceed 0.10 mg/l monthly average for all discharges with the exception of Tyson Foods, Inc., which shall meet 0.30 mg/l monthly average and 0.50 mg/l daily maximum.
6. Other physical and chemical constituents	Other physical or chemical constituents not specifically mentioned will be covered by additional specifications as conditions detrimental to the stream arise. The specific mention of items 1 through 5 does not necessarily mean that

	the addition of other physical or chemical constituents will be condoned.

n. No sewage discharges, regardless of degree of treatment, should be allowed into the James River between Bosher and Williams Island Dams.

o. The concentration and total amount of impurities in Tuckahoe Creek and its tributaries of sewage origin shall be limited to those amounts from sewage, industrial wastes, and other wastes that are now present in the stream from natural sources and from existing discharges in the watershed.

p. Canceled.

q. Canceled.

r. Canceled.

s. Canceled.

t. Canceled.

u. Maximum temperature for the New River Basin from the Virginia-West Virginia state line upstream to the Giles-Montgomery County line:

The maximum temperature shall be 27°C (81°F) unless caused by natural conditions; the maximum rise above natural temperatures shall not exceed 2.8°C (5°F).

This maximum temperature limit of 81°F was established in the 1970 water quality standards amendments so that Virginia temperature criteria for the New River would be consistent with those of West Virginia, since the stream flows into that state.

v. The maximum temperature of the New River and its tributaries (except trout waters) from the Montgomery-Giles County line upstream to the Virginia-North Carolina state line shall be 29°C (84°F).

w. Canceled.

x. Clinch River from the confluence of Dumps Creek at river mile 268 at Carbo downstream to river mile 255.4. The special water quality criteria for copper (measured as total recoverable) in this section of the Clinch River are 12.4 µg/l for protection from chronic effects and 19.5 µg/l for protection from acute effects. These site-specific criteria are needed to provide protection to several endangered species of freshwater mussels.

y. ~~Tidal freshwater Potomac River and tidal tributaries that enter the tidal freshwater Potomac River from Cockpit Point (below Occoquan Bay) to the fall line at Chain Bridge. During November 1 through February 14 of each year the 30-day average concentration of total ammonia nitrogen (in mg N/L) shall not exceed, more than once every three years on the average, the following chronic ammonia criterion:~~

~~$$\left(\frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) \times 1.45(10^{0.028(25 - MAX)})$$~~

~~MAX = temperature in °C or 7, whichever is greater.~~

~~The default design flow for calculating steady-state wasteload allocations for this chronic ammonia criterion is the 30Q10, unless statistically valid methods are employed which demonstrate compliance with the duration and return frequency of this water quality criterion.~~ Cancelled.

z. A site specific dissolved copper aquatic life criterion of 16.3 µg/l for protection from acute effects and 10.5 µg/l for protection from chronic effects applies in the following area:

Little Creek to the Route 60 (Shore Drive) bridge including Little Channel, Desert Cove, Fishermans Cove, and Little Creek Cove.

Hampton Roads Harbor including the waters within the boundary lines formed by I-664 (Monitor-Merrimac Memorial Bridge Tunnel) and I-64 (Hampton Roads Bridge Tunnel), Willoughby Bay, and the Elizabeth River and its tidal tributaries.

This criterion reflects the acute and chronic copper aquatic life criterion for saltwater in 9VAC25-260-140 B X a water effect ratio. The water effect ratio was derived in accordance with 9VAC25-260-140 F.

aa. The following site-specific dissolved oxygen criteria apply to the tidal Mattaponi and Pamunkey Rivers and their tidal tributaries because of seasonal lower dissolved oxygen concentration due to the natural oxygen depleting processes present in the extensive surrounding tidal wetlands. These criteria apply June 1 through September 30 to Chesapeake Bay segments MPNTF, MPNOH, PMKTF, PMKOH and are implemented in accordance with subsection D of 9VAC25-260-185. These criteria supersede the open water criteria listed in subsection A of 9VAC25-260-185.

Designated use	Criteria Concentration/Duration	Temporal Application
Open water	30 day mean ≥ 4.0 mg/l	June 1 - September 30
	Instantaneous minimum ≥ 3.2 mg/l at temperatures <29°C	
	Instantaneous minimum ≥ 4.3 mg/l at temperatures ≥ 29°C	

A site-specific pH criterion of 5.0-8.0 applies to the tidal freshwater Mattaponi Chesapeake Bay segment MPNTF to reflect natural conditions.

bb. The following site-specific seasonal mean criteria should not be exceeded in the specified tidal James River segment more than twice in six years. Should consecutive exceedances of the same seasonal mean criterion occur in a waterbody segment after the effective date, January 9, 2020, of these chlorophyll a criteria, the department will examine additional lines of evidence, including the occurrence of harmful algae blooms, physicochemical monitoring and phytoplankton datasets, and fish kill reports in the evaluation of the appropriate assessment category for the waterbody segment. The department will develop guidance for inclusion in the Water Quality Assessment Guidance Manual to address evaluating the appropriate assessment category when consecutive exceedances of the same seasonal mean criterion occur. The department will determine if additional monitoring for harmful algal blooms is warranted.

Designated Use	Chlorophyll a µ/l	Chesapeake Bay Program Segment	Temporal Application
Open water	8	JMSTF2	March 1 - May 31

10	JMSTF1	(spring)
13	JMSOH	
7	JMSMH	
8	JMSPH	
21	JMSTF2	July 1 - September 30 (summer)
24	JMSTF1	
11	JMSOH	
7	JMSMH	
7	JMSPH	

The following site-specific chlorophyll a concentrations at the specified duration should not be exceeded more than 10% of the time over six summer seasons in the specified area of the tidal James River. These criteria protect against aquatic life effects due to harmful algal blooms. Such effects have not been documented in the upper portion of JMSTF2 or in JMSOH.

Chlorophyll a µg/l	Chesapeake Bay Program Segment	Spatial Application	Duration
--	JMSTF2	Upstream boundary of JMSTF2 to river mile 95	--
52	JMSTF2	River mile 95 to downstream boundary of JMSTF2	1-month median
52	JMSTF1	Upstream boundary of JMSTF1 to river mile 67	1-month median
34	JMSTF1	River mile 67 to downstream boundary of JMSTF1	1-month median
--	JMSOH	Entire segment	--
59	JMSMH	Entire segment	1-day median
20	JMSPH	Entire segment	1-day median

(1) The site-specific numerical chlorophyll a criteria apply to the tidal James River segments (excludes tributaries) JMSTF2, JMSTF1, JMSOH, JMSMH, and JMSPH, the boundaries of which are described in EPA 903-R-05-004.

(2) For segments JMSOH, JMSMH, and JMSPH, the median of same-day samples collected one meter or less in a segment should be calculated to represent the chlorophyll a expression of a segment over that day, and the median of same-month chlorophyll a values should be calculated to represent the chlorophyll a expression of a segment over that

month. The seasonal geometric mean shall be calculated from the monthly chlorophyll a values for a segment.

(3) For segment JMSTF2, chlorophyll a data collected in the "upper zone" (from the upstream boundary at the fall line to approximately river mile 95 (N37° 23' 15.27" / W77° 18' 45.05" to N37° 23' 19.31" / W77° 18' 54.03")) should be pooled, in the manner described in subdivision bb (2) of this section, separately from chlorophyll a data collected in the "lower zone" (from river mile 95 to the downstream boundary of JMSTF2). The seasonal geometric mean for each of these zones should be calculated from their respective monthly chlorophyll a values. To calculate the seasonal segment-wide geometric mean, an area-weighted average of the zonal geometric means should be calculated using the following equation:

Upper Zone Geometric Mean x 0.41 + Lower Zone Geometric Mean x 0.59

(4) For segment JMSTF1, chlorophyll a data collected in the "upper zone" (from the upstream boundary of JMSTF1 to approximately river mile 67 (N37° 17' 46.21" / W77° 7' 9.55" to N37° 18' 58.94" / W77° 6' 57.14")) should be pooled, in the manner described in subdivision bb (2) of this section, separately from chlorophyll a data collected in the "lower zone" (between river mile 67 to the downstream boundary of JMSTF1). The seasonal geometric mean for each of these zones should be calculated from their respective monthly chlorophyll a values. To calculate the seasonal segment-wide geometric mean, an area-weighted average of the zonal geometric means should be calculated using the following equation:

Upper Zone Geometric Mean x 0.49 + Lower Zone Geometric Mean x 0.51

cc. For Mountain Lake in Giles County, chlorophyll a shall not exceed 6 µg/L at a depth of six meters and orthophosphate-P shall not exceed 8 µg/L at a depth of one meter or less.

dd. For Lake Drummond, located within the boundaries of Chesapeake and Suffolk in the Great Dismal Swamp, chlorophyll a shall not exceed 35 µg/L and total phosphorus shall not exceed 40 µg/L at a depth of one meter or less.

ee. Maximum temperature for these seasonally stockable trout waters is 26°C and applies May 1 through October 31.

ff. Maximum temperature for these seasonally stockable trout waters is 28°C and applies May 1 through October 31.

gg. Little Calfpasture River from the Goshen Dam to 0.76 miles above its confluence with the Calfpasture River has a stream condition index (A Stream Condition Index for Virginia Non-Coastal Streams, September 2003, Tetra Tech, Inc.) of at least 20.5 to protect the subcategory of aquatic life that exists in this river section as a result of the hydrologic modification. From 0.76 miles to 0.02 miles above its confluence with the Calfpasture River, aquatic life conditions are expected to gradually recover and meet the general aquatic life uses at 0.02 miles above its confluence with the Calfpasture River.

hh. Maximum temperature for these seasonally stockable trout waters is 31°C and applies May 1 through October 31.

ii. In the wadeable portions of the mainstem sections of the Shenandoah River, North Fork Shenandoah River, and South Fork Shenandoah River listed below, a determination of persistent nuisance filamentous algae impeding the recreation use should be made when exceedances of the specified benthic chlorophyll-a concentration thresholds occur in more than one recreation season (May 1 to October 31) in three years. "Wadeable" constitutes a stream that can be crossed and sampled safely during a given sampling event occurring within the recreation season.

Segment	Two-Month Median (mg/m^2)	Seasonal Median (mg/m^2)
Shenandoah River from its confluence of the North Fork and South Fork Shenandoah Rivers downstream to the Virginia/West Virginia state line	150	100
North Fork Shenandoah River from its confluence with Fort Run downstream to its confluence with the South Fork Shenandoah River	150	100
South Fork Shenandoah River from its confluence with the North and South Rivers downstream to its confluence with the North Fork Shenandoah River	150	100

9VAC25-260-390. Potomac River Basin (Potomac River Subbasin).

Potomac River Subbasin

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	II	a	Tidal tributaries of the Potomac River from Smith Point to Upper Machodoc Creek (Baber Point).
1a	III		All free flowing portions of tributaries to the Potomac River from Smith Point to the Route 301 Bridge in King George County unless otherwise designated in this chapter.
	VII		Swamp waters in Section 1a
			Mattox Creek and its tributaries from the head of tidal waters to their headwaters.
			Monroe Creek and tributaries from the head of tidal waters at Route 658 to their headwaters.
			Pine Hill Creek and its tributaries from the confluence with Rosier Creek to their headwaters.
			Popes Creek and Canal Swamp (a tributary to the tidal portion of Popes Creek) and their tributaries from the head of tidal waters to their respective headwaters.
1b	III	b	All free flowing portions of tributaries to the Potomac River from the Route 301 Bridge in King George County to, and including, Potomac Creek, unless otherwise designated in this chapter.

1c	III	PWS,b	Potomac Creek and its tributaries from the Stafford County water supply dam (Abel Lake Reservoir) to their headwaters.
2	II	a	Tidal Upper Machodoc Creek and the tidal portions of its tributaries.
2a	III		Free flowing portions of Upper Machodoc Creek and its tributaries.
3	II	b	Tidal portions of the tributaries to the Potomac River from the Route 301 Bridge in King George County to Marlboro Point.
4	II	b	Tidal portions of the tributaries to the Potomac River from Marlboro Point to Brent Point (to include Aquia Creek and its tributaries).
4a	III	b	Free flowing portions of tributaries to the Potomac River in Section 4 up to the Aquia Sanitary District Water Impoundment.
4b	III	PWS,b	Aquia Creek from the Aquia Sanitary District Water Impoundment, and other tributaries into the impoundment, including Beaverdam Run and the Lunga Reservoir upstream to their headwaters.
5	II	b	Tidal portions of tributaries to the Potomac River from Brent Point to Shipping Point, including tidal portions of Chopawamsic Creek and its tidal tributaries.
5a	III	b	Free flowing portions of Chopawamsic Creek and its tributaries upstream to Quantico Marine Base water supply dam.
5b	III	PWS,b	Chopawamsic Creek and its tributaries above the Quantico Marine Base water supply intakes at the Gray and Breckenridge Reservoirs to their headwaters.
6	II	~~b, y~~	Tidal portions of tributaries to the Potomac River from Shipping Point to Chain Bridge.
7	III	b	Free flowing portions of tributaries to the Potomac River from Shipping Point to Chain Bridge, unless otherwise designated in this chapter.
7a	III	g	Occoquan River and its tributaries to their headwaters above Fairfax County Water Authority's water supply impoundment, unless otherwise designated in this chapter.

7b	III	PWS,g	The impounded waters of Occoquan River above the water supply dam of the Fairfax County Water Authority to backwater of the impoundment on Bull Run and Occoquan River, and the tributaries of Occoquan above the dam to points 5 miles above the dam.
7c	III	PWS,g	Broad Run and its tributaries above the water supply dam of the City of Manassas upstream to points 5 miles above the dam.
7d			(Deleted)
7e	III	PWS,g	Cedar Run and its tributaries from the Town of Warrenton's raw water intake to points 5 miles upstream (Fauquier County).
7f	III	PWS,g	The Quantico Marine Base Camp Upshur and its tributaries' raw water intake on Cedar Run (located approximately 0.2 mile above its confluence with Lucky Run) to points 5 miles upstream.
7g	III	PWS,g	The proposed impounded waters of Licking Run above the multiple purpose impoundment structure in Licking Run near Midland (Fauquier County) upstream to points 5 miles above the proposed impoundment.
7h	III	PWS,g	The proposed impounded waters of Cedar Run above the proposed multiple purpose impoundment structure on the main stem of Cedar Run near Auburn (Fauquier County), to points 5 miles above the impoundment.
8	III	PWS	Tributaries to the Potomac River in Virginia between Chain Bridge and the Monacacy River from their confluence with the Potomac upstream 5 miles, to include Goose Creek to the City of Fairfax's raw water intake, unless otherwise designated in this chapter.
8a	VI	PWS	Big Spring Creek and its tributaries in Loudoun County, from its confluence with the Potomac River upstream to their headwaters. (The temperature standard for natural trout water may be exceeded in the area above Big Spring and Little Spring at Routes 15 and 740 due to natural conditions). This section was given a PWS designation due to the Town of Leesburg's intake on the Potomac as referenced in Section 8b.
	iii		Big Spring Creek from its confluence with the Potomac River upstream to Big Spring.
8b	III	PWS	Those portions of Virginia tributaries into the Potomac River that are within a 5 mile distance upstream of the Town of

			Leesburg's intake on the Potomac River, unless otherwise designated in this chapter.*
8c	III	PWS	Those portions of Virginia tributaries into the Potomac River that are within a 5 mile distance upstream of the County of Fairfax's intake on the Potomac River.*
9	III		Broad Run, Sugarland Run, Difficult Run, Tuscarora Creek, Sycolin Creek, and other streams tributary to streams in Section 8 from a point 5 miles above their confluence with the Potomac River to their headwaters, unless otherwise designated in this chapter.
9a	III	PWS	All the impounded water of Goose Creek from the City of Fairfax's water supply dam upstream to backwater, and its tributaries above the dam to points 5 miles above the dam.
9b	III	PWS	The Town of Round Hill's (inactive-early 1980s) raw water intake at the Round Hill Reservoir, and including the two spring impoundments located northwest of the town on the eastern slope of the Blue Ridge Mountains.
9c	III	PWS	Unnamed tributary to Goose Creek, from Camp Highroad's (inactive-late 1980s) raw water intake (Loudoun County) located in an old quarry to its headwaters.
9d	III	PWS	Sleeter Lake (Loudoun County).
10	III		Tributaries of the Potomac River from the Monacacy River to the West Virginia-Virginia state line in Loudoun County, from their confluence with the Potomac River upstream to their headwaters, unless otherwise designated in this chapter.
10a	III	PWS	North Fork Catoctin Creek and its tributaries from Purcellville's raw water intake to their headwaters.
10b	III		South Fork Catoctin Creek and its tributaries from its confluence with the North Fork Catoctin Creek to its headwaters.
11	IV	pH-6.5-9.5	Tributaries of the Potomac River in Frederick and Clarke Counties, Virginia, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 11
	***	pH-6.5-9.5	Back Creek (upper) from Rock Enon 4 miles upstream.
	***	pH-6.5-9.5	Back Creek (lower) from Route 600 to the mouth of Hogue Creek - 2 miles.
	***	hh	Hogue Creek from Route 679 upstream 6 miles to the Forks below Route 612.

	vi	pH-6.5-9.5	Opequon Creek (in Frederick County) from its confluence with Hoge Run upstream to the point at which Route 620 first crosses the stream.
	vi	pH-6.5-9.6	Turkey Run (Frederick County) from its confluence with Opequon Creek 3.6 miles upstream.
	VI		Natural Trout Waters in Section 11
	ii	pH-6.5-9.5	Bear Garden Run from its confluence with Sleepy Creek 3.1 miles upstream.
	iii	pH-6.5-9.5	Redbud Run from its confluence with Opequon Creek 4.4 miles upstream.
11a	IV	pH-6.5-9.5	Hot Run and its tributaries from its confluence with Opequon Creek to its headwaters.
	V		Stockable Trout Waters in Section 11a
	vi	pH-6.5-9.5	Clearbrook Run from its confluence with Hot Run 2.1 miles upstream.
12	IV	ESW-6	South Branch Potomac River and its tributaries, such as Strait Creek, and the North Fork River and its tributaries from the Virginia-West Virginia state line to their headwaters.
	V		Stockable Trout Waters in Section 12
	vi		Frank Run from its confluence with the South Branch Potomac River 0.8 mile upstream.
	vii	pH-6.5-9.5	South Branch Potomac River (in Highland County) from 69.2 miles above its confluence with the Potomac River 4.9 miles upstream.
	VI		Natural Trout Waters in Section 12
	ii		Blights Run from its confluence with Laurel Fork (Highland County) upstream including all named and unnamed tributaries.
	ii		Buck Run (Highland County) from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
	ii		Collins Run from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
	ii		Laurel Fork (Highland County) from 1.9 miles above its confluence with the North Fork South Branch Potomac River upstream including all named and unnamed tributaries.
	iii	pH-6.5-9.5	Laurel Run (Highland County) from its confluence with Strait Creek upstream including all named and unnamed tributaries.

ii		Locust Spring Run from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
ii		Lost Run from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
ii		Mullenax Run from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
ii		Newman Run from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
ii		Slabcamp Run from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
iii	pH-6.5-9.5	Strait Creek (Highland County) from its confluence with the South Branch Potomac River upstream to the confluence of West Strait Creek.

9VAC25-260-400. Potomac River Basin (Shenandoah River Subbasin).

Shenandoah River Subbasin

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	IV	pH-6.5-9.5, ii	Shenandoah River and its tributaries in Clarke County, Virginia, from the Virginia-West Virginia state line to Lockes Landing, unless otherwise designated in this chapter.
1a	IV	PWS pH-6.5-9.5, ii	Shenandoah River and its tributaries from river mile 24.66 (latitude 39°16'19"; longitude 77°54'33") approximately 0.7 mile downstream of the confluence of the Shenandoah River and Dog Run to 5 miles above Berryville's raw water intake, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 1a
	vi	pH-6.5-9.5	Chapel Run (Clarke County) from its confluence with the Shenandoah River 5.7 miles upstream.
	vi	pH-6.5-9.5	Spout Run (Clarke County) from its confluence with the Shenandoah River (in the vicinity of the Ebenezer Church at Route 604) to its headwaters.
1b			(Deleted)
1c	IV	pH-6.5-9.5, ii	Shenandoah River and its tributaries from a point 5 Miles above Berryville's raw water intake to the confluence of the North and South Forks of the Shenandoah River.

VI		Natural Trout Waters in Section 1c
iii	pH-6.5-9.5	Page Brook from its confluence with Spout Run, 1 mile upstream.
***	pH-6.5-9.5	Roseville Run (Clarke County) from its confluence with Spout Run upstream including all named and unnamed tributaries.

	iii		pH-6.5-9.5 Spout Run (Clarke County) from its confluence with the Shenandoah River (in the vicinity of Calmes Neck at Routes 651 and 621), 3.9miles upstream.
	***		pH-6.5-9.5 Westbrook Run (Clarke County) from its confluence with Spout Run upstream including all named and unnamed tributaries.
1d			(Note: Moved to Section 2b).
2	IV	ESW-~~12~~,14,15, ii	South Fork Shenandoah River from its confluence with the North Fork Shenandoah River, upstream to a point 5 miles above the Town of Shenandoah's raw water intake and its tributaries to their headwaters in this section, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 2
	vii		pH-6.5-9.5 Bear Lithia Spring from its confluence with the South Fork Shenandoah River 0.8 miles upstream.
	vi		pH-6.5-9.5 Flint Run from its confluence with the South Fork Shenandoah River 4 miles upstream.
	***		pH-6.5-9.5 Gooney Run from the mouth to its confluence with Broad Run above Browntown (in the vicinity of Route 632).
	***	hh	pH-6.5-9.5, Hawksbill Creek from Route 675 in Luray to 1 mile above Route 631.
	VI		Natural Trout Waters in Section 2
	ii		pH-6.5-9.5 Big Creek (Page County) from its confluence with the East Branch Naked Creek upstream including all named and unnamed tributaries.
	ii		pH-6.5-9.5 Big Ugly Run from its confluence with the South Branch Naked Creek upstream including all named and unnamed tributaries.
	ii		Boone Run from 4.6 miles above its confluence with the SouthFork Shenandoah River (in the vicinity of Route 637) upstream including allnamed and unnamed tributaries.
	iii		pH-6.5-9.5 Browns Run from its confluence with Big Run upstream including all named and unnamed tributaries.
	ii		Cub Run (Page County) from Pitt Spring Run upstream including all named and unnamed tributaries.
	***		pH-6.5-9.5 Cub Run from its mouth to Pitt Spring Run.

i pH-6.5-9.5 East Branch Naked Creek from its confluence with Naked Creek at Route 759 upstream including all named and unnamed tributaries.

ii pH-6.5-9.5 Fultz Run from the Park boundary (river mile 1.8) upstream including all named and unnamed tributaries.

ii pH-6.5-9.5 Gooney Run (Warren County) from 6.6 miles above its confluence with the South Fork Shenandoah River 3.9 miles upstream.

ii pH-6.5-9.5 Hawksbill Creek in the vicinity of Pine Grove at Route 624(river mile 17.7) 1.5 miles upstream.

ii pH-6.5-9.5 Jeremys Run from the Shenandoah National Park boundary upstream including all named and unnamed tributaries.

ii pH-6.5-9.5 Lands Run from its confluence with Gooney Run upstream including all named and unnamed tributaries.

ii pH-6.5-9.5 Little Creek (Page County) from its confluence with Big Creek upstream including all named and unnamed tributaries.

i pH-6.5-9.5 Little Hawksbill Creek from Route 626 upstream including all named and unnamed tributaries.

ii Morgan Run (Page County) from its confluence with Cub Run upstream including all named and unnamed tributaries.

ii pH-6.5-9.5 Overall Run from its confluence with the South Fork Shenandoah River 4.8 miles upstream including all named and unnamed tributaries.

ii pH-6.5-9.5 Pass Run (Page County) from its confluence with Hawksbill Creek upstream including all named and unnamed tributaries.

ii Pitt Spring Run from its confluence with Cub Run upstream including all named and unnamed tributaries.

ii Roaring Run from its confluence with Cub Run upstream including all named and unnamed tributaries.

ii pH-6.5-9.5 South Branch Naked Creek from 1.7 miles above its confluence with Naked Creek (in the vicinity of Route 607) upstream including all named and unnamed tributaries.

iv pH-6.5-9.5 Stony Run (Page County) from 1.6 miles above its confluence with Naked Creek upstream including all named and unnamed tributaries.

ii pH-6.5-9.5 West Branch Naked Creek from 2.1 miles above its confluence with Naked Creek upstream including all named and unnamed tributaries.

2a	IV	PWS, pH- 6.5-9.5	Happy Creek and Sloan Creek from Front Royal's raw water intake to its headwaters.

2b	IV	PWS, ii	The South Fork Shenandoah River and its tributaries from The Town of Front Royal's raw water intake (at the State Route 619 bridge at Front Royal) to points 5 miles upstream.
2c			(Deleted)
2d			(Deleted)
	V		Stockable Trout Waters in Section 2d
	VI		Natural Trout Waters in Section 2d
3	IV	pH-6.5-9.5, South Fork Shenandoah River from 5 miles above the ESW-12, 16	
		ii	Town of Shenandoah's raw water intake to its confluence with the North and South Rivers and its tributaries to their headwaters in this section, and the South River and its tributaries from its confluence with the South Fork Shenandoah River to their headwaters, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 3
	vi	pH-6.5-9.5 Hawksbill Creek (Rockingham County) from 0.8 mile above its confluence with the South Fork Shenandoah River 6.6 miles upstream.	
	vi	pH-6.5-9.5 Mills Creek (Augusta County) from 1.8 miles above its confluence with Back Creek 2 miles upstream.	
	vi	pH-6.5-9.5 North Fork Back Creek (Augusta County) from its confluence with Back Creek 2.6 miles upstream, unless otherwise designated in this chapter.	
	VI		Natural Trout Waters in Section 3
	i	pH-6.5-9.5 Bearwallow Run from its confluence with Onemile Run upstream including all named and unnamed tributaries.	
	ii	pH-6.5-9.5 Big Run (Rockingham County) from 3.3 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.	
	iii	pH-6.5-9.5 Cold Spring Branch (Augusta County) from Sengers Mountain Lake (Rhema Lake) upstream including all named and unnamed tributaries.	
	iv	pH-6.5-9.5 Cool Springs Hollow (Augusta County) from Route 612 upstream including all named and unnamed tributaries.	
	ii	pH-6.5-9.5 Deep Run (Rockingham County) from 1.8 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.	

ii pH-6.5-9.5 East Fork Back Creek from its confluence with the South Fork Back Creek upstream including all named and

unnamed tributaries.

ii	pH-6.5-9.5	Gap Run from 1.7 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
iii		Inch Branch (Augusta County) from the dam upstream including all named and unnamed tributaries.
ii		Johns Run (Augusta County) from its confluence with the South River upstream including all named and unnamed tributaries.
iv		Jones Hollow (Augusta County) from 1.1 miles above its confluence with the South River upstream including all named and unnamed tributaries.
ii		Kennedy Creek from its confluence with the South River upstream including all named and unnamed tributaries.
iv	pH-6.5-9.5	Lee Run from 0.6 mile above its confluence with Elk Run 3.3miles upstream.
iii	pH-6.5-9.5	Loves Run (Augusta County) from 2.7 miles above its confluence with the South River upstream including all named and unnamed tributaries.
ii	pH-6.5-9.5	Lower Lewis Run (Rockingham County) from 1.7 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
ii	pH-6.5-9.5	Madison Run (Rockingham County) from 2.9 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
ii	pH-6.5-9.5	Meadow Run (Augusta County) from its confluence with the South River upstream including all named and unnamed tributaries.
ii	pH-6.5-9.5	North Fork Back Creek (Augusta County) from river mile 2.6(in the vicinity of its confluence with Williams Creek) upstream including all named and unnamed tributaries.
i	pH-6.5-9.5	Onemile Run (Rockingham County) from 1.5 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
iv		Orebank Creek from its confluence with Back Creek upstream including all named and unnamed tributaries.

ii pH-6.5-9.5 Paine Run (Augusta County) from 1.7 miles above its confluence with the South River upstream including all named and unnamed tributaries.

	ii		Robinson Hollow (Augusta County) from the dam upstream including all named and unnamed tributaries.
	ii		pH-6.5-9.5 Rocky Mountain Run from its confluence with Big Run upstream including all named and unnamed tributaries.
	iv		pH-6.5-9.5 Sawmill Run from 2.5 miles above its confluence with the South River upstream including all named and unnamed tributaries.
	ii		pH-6.5-9.5 South Fork Back Creek from its confluence with Back Creek at Route 814 (river mile 2.1) upstream including all named and unnamed tributaries.
	ii		pH-6.5-9.5 Stony Run (Augusta County) from 3.5 miles above its confluence with the South River upstream including all named and unnamed tributaries.
	iii		pH-6.5-9.5 Stony Run (Rockingham County) from 4.1 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
	iii		Toms Branch (Augusta County) from 1.1 miles above its confluence with Back Creek upstream including all named and unnamed tributaries.
	i		pH-6.5-9.5 Twomile Run from 1.4 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
	iv		pH-6.5-9.5 Upper Lewis Run from 0.5 mile above its confluence with Lower Lewis Run upstream including all named and unnamed tributaries.
	iv		pH-6.5-9.5 West Swift Run (Rockingham County) from the Route 33crossing upstream including all named and unnamed tributaries.
	ii		pH-6.5-9.5 Whiteoak Run from its confluence with Madison Run upstream including all named and unnamed tributaries.
3a	IV		pH-6.5-9.5 South River from the former location of the dam above Waynesboro ~~(all waters of the impoundment)~~.
3b	IV	PWS	Coles Run and Mills Creek from South River Sanitary District's raw water intake to their headwaters.
	VI	PWS	Natural Trout Waters in Section 3b
	ii		Coles Run (Augusta County) from 3.9 miles above its confluence with the South River Sanitary District's raw water intake (Coles Run Dam) upstream including all named and unnamed tributaries.

ii Mills Creek (Augusta County) from the South River Sanitary District's raw water intake (river mile 3.8)

upstream including all named and unnamed tributaries.

3c	IV	PWS pH-6.5-9.5	A tributary to Coles Run from Stuarts Draft raw water intake approximately 0.5 mile south of Stuarts Draft and just off Route 610, to its headwaters.
4	IV	pH-6.5-9.5	Middle River and its tributaries from the confluence with the North River upstream to its headwaters, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 4
	v	pH-6.5-9.5	Barterbrook Branch from its confluence with Christians Creek2.8 miles upstream.
	***	pH-6.5-9.5	East Dry Branch from its confluence with the Buffalo Branch to its confluence with Mountain Run.
	vi	pH-6.5-9.5	Folly Mills Creek from 2.4 miles above its confluence with Christians Creek (in the vicinity of Route 81) 4.5 miles upstream.
	VI		Natural Trout Waters in Section 4
	iv		Buffalo Branch from Route 703 upstream including all named and unnamed tributaries.
	ii		Cabin Mill Run (Augusta County) from the Camp Shenandoah Boy Scout Lake upstream including all named and unnamed tributaries.
	iv		East Dry Branch (Augusta County) from the confluence of Mountain Run upstream including all named and unnamed tributaries.
	iv		Jennings Branch (Augusta County) from the confluence of White Oak Draft upstream including all named and unnamed tributaries.
4a	IV	PWS pH-6.5-9.5	Middle River and its tributaries from Staunton's raw water intake at Gardner Spring to points 5 miles upstream.
5	IV	pH-6.5-9.5	North River and its tributaries from its confluence with The South River upstream to its headwaters, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 5
	v	pH-6.5-9.5	Beaver Creek (Rockingham County) from its confluence with Briery Branch to the spring at a point 2.75 miles upstream.

v pH-6.5-9.5 Naked Creek (Augusta County) from 3.7 miles above its confluence with the North River at Route 696, 2 miles upstream.

	VI	Natural Trout Waters in Section 5
	iv	Big Run (Augusta County) from 0.9 mile above its confluencewith Little River upstream including all named and unnamed tributaries.
	ii	Black Run (Rockingham County) from its mouth upstream including all named and unnamed tributaries.
	iii	Briery Branch (Rockingham County) from river mile 6.9upstream including all named and unnamed tributaries.
	iv	Gum Run from its mouth upstream including all named and unnamed tributaries.
	iii	Hone Quarry Run from its confluence with Briery Branch upstream including all named and unnamed tributaries.
	iv	Little River from its confluence with the North River at Route 718 upstream including all named and unnamed tributaries.
	iv	Maple Spring Run from its mouth upstream including all named and unnamed tributaries.
	iv	Mines Run from its confluence with Briery Branch upstream including all named and unnamed tributaries.
	iv	Rocky Run (which is tributary to Briery Branch in Rockingham County) from its mouth upstream including all named and unnamed tributaries.
	iii	Rocky Run (which is tributary to Dry River in Rockingham County) from its mouth upstream including all named and unnamed tributaries.
	ii	Union Springs Run from 3 miles above its confluence with Beaver Creek upstream including all named and unnamed tributaries.
	iv	Wolf Run (Augusta County) from its confluence with Briery Branch upstream including all named and unnamed tributaries.
5a	IV PWS pH-6.5 9.5	Silver Lake
5b	IV PWS pH-6.5 9.5	North River and its tributaries from Harrisonburg's raw water intake at Bridgewater to points 5 miles above Bridgewater's raw water intake to include Dry River and Muddy Creek.

V	PWS	Stockable Trout Waters in Section 5b

	v		pH-6.5-9.5 Mossy Creek from its confluence with the North River 7.1miles upstream.
	v		pH-6.5-9.5 Spring Creek (Rockingham County) from its confluence with the North River 2 miles upstream.
5c	IV	PWS	Dry River (Rockingham County) from Harrisonburg's raw water intake (approximately 11.7 miles above its confluence with the North River) to a point 5 miles upstream including Skidmore Fork upstream to the headwaters of Switzer Lake, unless otherwise designated in this chapter.
	V	PWS	Stockable Trout Waters in Section 5c
	viii		Raccoon Run (Rockingham County) from its confluence with Dry River to its headwaters.
	VI	PWS	Natural Trout Waters in Section 5c
	iv		Dry River (Rockingham County) from Harrisonburg's raw water intake (approximately 11.7 miles above its confluence with the North River)to a point 5 miles upstream.
	iv		Dry Run (Rockingham County) from its confluence with Dry River upstream including all named and unnamed tributaries.
	iv		Hopkins Hollow from its confluence with Peach Run upstream including all named and unnamed tributaries.
	iv		Kephart Run from its confluence with Dry River upstream including all named and unnamed tributaries.
5d	VI		Dry River and its tributaries from 5 miles Above Harrisonburg's raw water intake to its headwaters.
	V		Stockable Trout Waters in Section 5d
	viii		Switzer Lake from its dam upstream to the impoundment headwaters.
	VI		Natural Trout Waters in Section 5d
	iv		Dry River (Rockingham County) from 5 miles above Harrisonburg's raw water intake upstream including all named and unnamed tributaries.
	ii		Laurel Run (Rockingham County) from its confluence with Dry River upstream including all named and unnamed tributaries.

	ii		Little Laurel Run from its confluence with Dry River upstream including all named and unnamed tributaries.
	ii		Low Place Run from its confluence with Dry River upstream including all named and unnamed tributaries.
	iv		Miller Spring Run from its confluence with Dry Riverupstream including all named and unnamed tributaries.
	iii		Sand Run from its confluence with Dry River upstream including all named and unnamed tributaries.
	iv		Skidmore Fork from its confluence with Dry River upstream including all named and unnamed tributaries. This does not include Switzer Lake which are Class V Stockable Trout Waters.
5e	VI	PWS	North River and its tributaries from Staunton Dam to their headwaters unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 5e
	iii	ee	Elkhorn Lake from the dam upstream to the impoundment headwaters.
	VI		Natural Trout Waters in Section 5e
	iv		North River from the headwaters of Elkhorn ~~Dam~~ Lake upstream including all named and unnamed tributaries.
6	IV	pH-6.5-9.5, ii	North Fork Shenandoah River from its confluence with The Shenandoah River to its headwaters, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 6
	vi	pH-6.5-9.5	Bear Run from its confluence with Foltz Creek to its headwaters.
	vi	pH-6.5-9.5	Bull Run (Shenandoah County) from its confluence with Foltz Creek to its headwaters.
	vi	pH-6.5-9.5	Falls Run from its confluence with Stony Creek to its headwaters.
	vi	pH-6.5-9.5	Foltz Creek from its confluence with Stony Creek to its headwaters.
	vi	pH-6.5-9.5	Little Passage Creek from its confluence with Passage Creek to the Strasburg Reservoir Dam.

*** pH-6.5-9.5, Mill Creek from Mount Jackson to Route 720 - 3.5 miles.
hh

vi pH-6.5-9.5 Mountain Run from its mouth at Passage Creek to its headwaters.

*** pH-6.5-9.5 Passage Creek from the U.S. Forest Service line (in the vicinity of Blue Hole and Buzzard Rock) 4 miles upstream.

vi pH-6.5-9.5 Passage Creek from 29.6 miles above its confluence with the North Fork Shenandoah River to its headwaters.

vi pH-6.5-9.5 Peters Mill Run from the mouth to its headwaters.

*** pH-6.5-9.5 Shoemaker River from 612 at Hebron Church to its junction with Route 817 at its confluence with Slate Lick Branch.

v pH-6.5-9.5 Stony Creek from its confluence with the North Fork Shenandoah River to Route 682.

***	pH-6.5-9.5	Stony Creek from Route 682 above Edinburg upstream to Basye.
VI		Natural Trout Waters in Section 6
ii	pH-6.5-9.5	Anderson Run (Shenandoah County) from 1.1 miles above its confluence with Stony Creek upstream including all named and unnamed tributaries.
iv		Beech Lick Run from its confluence with the German River upstream including all named and unnamed tributaries.
iii		Bible Run from its confluence with Little Dry River upstream including all named and unnamed tributaries.
ii		Camp Rader Run from its confluence with the German Riverupstream including all named and unnamed tributaries.
iv		Carr Run from its confluence with Little Dry River upstream including all named and unnamed tributaries.
iv		Clay Lick Hollow from its confluence with Carr Run upstream including all named and unnamed tributaries.
iv		Gate Run from its confluence with Little Dry River upstream including all named and unnamed tributaries.
iv		German River (Rockingham County) from its confluence with the North Fork Shenandoah River at Route 820 upstream including all named and unnamed tributaries.
ii		Laurel Run (Shenandoah County) from its confluence with Stony Creek upstream including all named and unnamed tributaries.
ii		Little Stony Creek from its confluence with Stony Creek upstream including all named and unnamed tributaries.
iv		Marshall Run (Rockingham County) from 1.2 miles above its confluence with the North Fork Shenandoah River upstream including all named and unnamed tributaries.
iii	pH-6.5-9.5	Mine Run (Shenandoah County) from its confluence with Passage Creek upstream including all named and unnamed tributaries.
ii	pH-6.5-9.5	Poplar Run (Shenandoah County) from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.

iv pH-6.5-9.5 Rattlesnake Run (Rockingham County) from its confluence with Spruce Run upstream including all named and unnamed tributaries.

	iv		Root Run from its confluence with Marshall Run upstream including all named and unnamed tributaries.
	iv		Seventy Buck Lick Run from its confluence with Carr Run upstream including all named and unnamed tributaries.
	iv		Sirks Run (Spring Run) from 1.3 miles above its confluence with Crab Run upstream including all named and unnamed tributaries.
	iv	pH-6.5-9.5	Spruce Run (Rockingham County) from its confluence with Capon Run upstream including all named and unnamed tributaries.
	iv	pH-6.5-9.5	Sumac Run from its confluence with the German River upstream including all named and unnamed tributaries.
6a	~~IV~~ V	PWS pH-6.5 9.5	Little Passage Creek from the Strasburg Reservoir Dam upstream to its headwaters, unless otherwise designated in this chapter.
	V	PWS	Stockable Trout Waters in Section 6a
	vi	pH-6.5-9.5	Little Passage Creek from the Strasburg Reservoir Dam upstream to its headwaters.
6b	IV	PWS pH-6.5 9.5	North Fork Shenandoah River and its tributaries from the Winchester raw water intake to points 5 miles upstream (to include Cedar Creekand its tributaries to their headwaters).
	V	PWS	Stockable Trout Waters in Section 6b
	***	pH-6.5-9.5	Cedar Creek (Shenandoah County) from Route 55 (river mile 23.56)to the U.S. Forest Service Boundary (river mile 32.0) - approximately 7miles.
	v	PWS pH-6.5- 9.5	Meadow Brook (Frederick County) from its confluence with Cedar Creek 5 miles upstream.
	VI	PWS	Natural Trout Waters in Section 6b
	iii	pH-6.5-9.5	Cedar Creek (Shenandoah County) from the U.S. Forest Service boundary (river mile 32.0) near Route 600 upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Duck Run from its confluence with Cedar Creek upstream including all named and unnamed tributaries.
			Paddy Run (Frederick County) from the mouth upstream including all named and unnamed tributaries.

*** Paddy Run (Frederick County) from its mouth (0.0) to river mile 1.8.

	vi**		Paddy Run (Frederick County) from river mile 1.8 to rivermile 8.16.3 miles.
	iii	pH-6.5-9.5	Sulphur Springs Gap (Shenandoah County) from its confluence with Cedar Creek 1.9 miles upstream.
6c	IV PWS	pH-6.5 9.5	North Fork Shenandoah River and its tributaries from Strasburg's raw water intake to points 5 miles upstream.
6d	IV PWS	pH-6.5 9.5	North Fork Shenandoah River and its tributaries fromWoodstock's raw water intake (approximately 0.25 mile upstream of State Route609 bridge near Woodstock) to points 5 miles upstream.
6e	IV PWS	pH-6.5 9.5	Smith Creek and its tributaries from New Market's raw water intake to their headwaters.
			Natural Trout Waters in Section 6e
	iv	pH-6.5-9.5	Mountain Run (Fridley Branch, Rockingham County) from Route722 upstream including all named and unnamed tributaries.
6f	IV PWS	pH-6.5 9.5	North Fork Shenandoah River and its tributaries from the Food Processors Water Coop, Inc. dam at Timberville and the Town of Broadway's intakes on Linville Creek and the North Fork Shenandoah to points5 miles upstream.
6g	IV		Shoemaker River and its tributaries from Slate Lick Run, And including Slate Lick Run, to its headwaters.
	V		Stockable Trout Waters in Section 6g
	***		Slate Lick Run from its confluence with the Shoemaker River upstream to the 1500 foot elevation.
	VI		Natural Trout Waters in Section 6g
	iv		Long Run (Rockingham County) from its confluence with the Shoemaker River upstream including all named and unnamed tributaries.
	iv		Slate Lick Run from the 1500 foot elevation upstream including all named and unnamed tributaries.
6h	IV PWS	pH-6.5 9.5	Unnamed tributary of North Fork Shenandoah River (on the western slope of Short Mountain opposite Mt. Jackson) from the Town of Mt. Jackson's (inactive mid-1992) raw water intake (north and east dams) to its headwaters.
6i	IV PWS	pH-6.5	Little Sulfur Creek, Dan's Hollow and Horns

9.5 Gully (tributaries of the North Fork Shenandoah River on the western slope of Short Mountain opposite Mt. Jackson) which served as a water supply for the Town

of Edinburg until March 31, 1992, from the Edinburg intakes upstream to their headwaters.

9VAC25-260-410. James River Basin (Lower).

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	II	a, z, bb, ESW-11	James River and its tidal tributaries from Old Point Comfort - Fort Wool to the end of tidal waters (fall line, Mayo's Bridge, 14th Street, Richmond), except prohibited or spoil areas, unless otherwise designated in this chapter.
1a	III		Free flowing or nontidal portions of streams in Section 1, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 1a
1b	II	a, z	Gunns Run and its tributaries from the head of tide at river mile 2.64 to its headwaters. Eastern and Western Branches of the Elizabeth River and tidal portions of their tributaries from their confluence with the Elizabeth River to the end of tidal waters.
1c	III		Free flowing portions of the Eastern Branch of the Elizabeth River and its tributaries. Includes Salem Canal up to its intersection with Timberlake Road at N36°48'35.67"/W76°08'31.70".
1d	II	a, z	Southern Branch of the Elizabeth River from its confluence with the Elizabeth River to the lock at Great Bridge.
1e	III		Free flowing portions of the Western Branch of the Elizabeth River and of the Southern Branch of the Elizabeth River from their confluence with the Elizabeth River to the lock at Great Bridge.
1f	II	a	Nansemond River and its tributaries from its confluence with the James River to Suffolk (dam at Lake Meade), unless otherwise designated in this chapter.
~~1g~~	~~III~~		~~Shingle Creek from to its headwaters in the Dismal Swamp~~
	VII		Swamp waters in Section 1g

			Shingle Creek and its tributaries from the head of tide (approximately 500 feet downstream of Route 13/337) to their headwaters.
1h	III	PWS	Lake Prince, Lake Burnt Mills and Western Branch impoundments for Norfolk raw water supply and Lake Kilby - Cahoon Pond, Lake Meade and Lake Speight impoundments for Portsmouth raw water supply and including all tributaries to these impoundments.
	VII		Swamp waters in Section 1h
			Eley Swamp and its tributaries from Route 736 upstream to their headwaters.
1i	III		Free flowing portions of the Pagan River and its free flowing tributaries.
1j			(Deleted)
1k	III	PWS	Skiffes Creek Reservoir (Newport News water impoundment).
1l	III	PWS	The Lone Star lakes and impoundments in the City of Suffolk, Chuckatuck Creek watershed which serve as a water source for the City of Suffolk.
1m	III	PWS	The Lee Hall Reservoir system, near Skiffes Creek and the Warwick River, in the City of Newport News.
1n	III	PWS	Chuckatuck Creek and its tributaries from Suffolk's raw water intake (at Godwin's Millpond) to a point 5 miles upstream.
1o	II	PWS, bb	James River from City Point (Hopewell) to a point 5 miles upstream.
1p	III	PWS	Free flowing tributaries to section 1o.
2	III		Free flowing tributaries of the Chickahominy River to Walkers Dam, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 2
			Morris Creek and its tributaries from the head of tide at river mile 5.97 upstream to its headwaters.
2a	III	PWS	Diascund Creek and its tributaries from Newport News's raw water intake dam to its headwaters.

2b	III	PWS	Little Creek Reservoir and its tributaries from the City of Newport News impoundment dam to 5 miles upstream of the raw water intake.
3	III	m	Chickahominy River and its tributaries from Walkers Dam to Bottoms Bridge (Route 60 bridge), unless otherwise designated in this chapter.
	VII		Swamp waters in Section 3
		m	Chickahominy River from its confluence with Toe Ink Swamp at river mile 43.07 upstream to Bottoms Bridge (Route 60).
		m	Rumley Marsh and tributaries from the confluence of an unnamed tributary at river mile 2.61, upstream to the confluence with Beus Swamp. Beus Swamp, Piney Branch, and Pelham Swamp above the confluence of Beus Swamp are excluded.
		m	White Oak Swamp and its tributaries from its confluence with the Chickahominy River to their headwaters.
3a	III	PWS, m	Chickahominy River and its tributaries from Walkers Dam to points 5 miles upstream.
4	III	m	Chickahominy River and its tributaries, unless otherwise designated in this chapter, from Bottoms Bridge (Route 60 bridge) to its headwaters.
	VII		Swamp waters in Section 4
		m	Chickahominy River from Bottoms Bridge (Route 60) upstream to its confluence with Stony Run at rivermile 71.03.
		m	Stony Run and tributaries from the confluence with Chickahominy River to their headwaters.
4a	III		Free flowing tributaries to the James River from Brandon to the fall line at Richmond, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 4a
			Fourmile Creek and its tributaries to their headwaters.

9VAC25-260-420. James River Basin (Middle).

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
6	III		James River and its tributaries from the fall line at Richmond (Mayo's Bridge, 14th Street) to the Rockfish River unless otherwise designated in this chapter.
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11e	III		James River and its tributaries, excluding Blackwater Creek, from Six Mile Bridge to the ~~Business Route 29 bridge~~ 5th Street Bridge in Lynchburg.

9VAC25-260-440. Rappahannock River Basin.

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	II	a	Rappahannock River and the tidal portions of its tributaries from Stingray and Windmill Points to Route 1 Alternate Bridge at Fredericksburg.
1a	II		Hoskins Creek from the confluence with the Rappahannock River to its tidal headwaters.
2	III		Free flowing tributaries of the Rappahannock from Stingray and Windmill Points upstream to Blandfield Point, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 2
			Cat Point Creek and its tributaries, from their headwaters to the head of tide at river mile 10.54.
			Hoskins Creek and its nontidal tributaries from the head of tidal waters to their headwaters.
			Mount Landing Creek and its tributaries from the end of tidal waters at river mile 4.4 to their headwaters.
			Piscataway Creek and its tributaries from the confluence of Sturgeon Swamp to their headwaters.

3	III		The Rappahannock River from the Route 1 Alternate Bridge at Fredericksburg upstream ~~to the low dam water intake at Waterloo (Fauquier County)~~ to its headwaters, unless otherwise designated in this chapter.
3a	III	PWS	The Rappahannock River and its tributaries from Spotsylvania County's raw water intake near Golin Run to points 5 miles upstream of the Rocky Pen Run Reservoir (Lake Mooney) pump and store intake (excluding Motts Run and tributaries, which is in Section 4c).
3b	III	PWS	The Rappahannock River and its tributaries from the low dam water intake at Waterloo (Fauquier County) to points 5 miles upstream.
4	III	ESW 17,18, 28	Free flowing tributaries of the Rappahannock from ~~Blandfield Point~~ from the Route 1 Alternate Bridge at Fredericksburg to its headwaters, unless otherwise designated in this chapter.
			Swamp waters in Section 4
	VII		Goldenvale Creek from the head of tidal waters near the confluence with the Rappahannock River to its headwaters.
			Occupacia Creek and its tributaries from the end of tidal waters at river mile 8.89 on Occupacia Creek to their headwaters.
	V		Stockable Trout Waters in Section 4
	***		Hughes River (Madison County) from Route 231 upstream to the upper crossing of Route 707 near the confluence of Rocky Run.
	***		Robinson River from Route 231 to river mile 26.7.
	***		Rose River from its confluence with the Robinson River 2.6 miles upstream.
	***		South River from 5 miles above its confluence with the Rapidan River 3.9 miles upstream.
	VI		Natural Trout Waters in Section 4
	ii		Berry Hollow from its confluence with the Robinson River upstream including all named and unnamed tributaries.
	ii		Bolton Branch from 1.7 miles above its confluence with Hittles Mill Stream upstream including all named and unnamed tributaries.

ii	Broad Hollow Run from its confluence with Hazel River upstream including all named and unnamed tributaries.
i	Brokenback Run from its confluence with the Hughes River upstream including all named and unnamed tributaries.
i	Bush Mountain Stream from its confluence with the Conway River upstream including all named and unnamed tributaries.
i	Cedar Run (Madison County) from 0.8 mile above its confluence with the Robinson River upstream including all named and unnamed tributaries.
i	Conway River (Greene County) from the Town of Fletcher upstream including all named and unnamed tributaries.
ii	Dark Hollow from its confluence with the Rose River upstream including all named and unnamed tributaries.
i	Devils Ditch from its confluence with the Conway River upstream including all named and unnamed tributaries.
iii	Entry Run from its confluence with the South River upstream including all named and unnamed tributaries.
iii	Garth Run from 1.9 miles above its confluence with the Rapidan River at the Route 665 crossing upstream including all named and unnamed tributaries.
ii	Hannah Run from its confluence with the Hughes River upstream including all named and unnamed tributaries.
ii	Hazel River (Rappahannock County) from the Route 707 bridge upstream including all named and unnamed tributaries.
ii	Hogcamp Branch from its confluence with the Rose River upstream including all named and unnamed tributaries.
i	Hughes River (Madison County) from the upper crossing of Route 707 near the confluence of Rocky Run upstream including all named and unnamed tributaries.
iii	Indian Run (Rappahannock County) from 3.4 miles above its confluence with the Hittles Mill Stream upstream including all named and unnamed tributaries.

ii	Jordan River (Rappahannock County) from 10.9 miles above its confluence with the Rappahannock River upstream including all named and unnamed tributaries.
iii	Kinsey Run from its confluence with the Rapidan River upstream including all named and unnamed tributaries.
ii	Laurel Prong from its confluence with the Rapidan River upstream including all named and unnamed tributaries.
ii	Mill Prong from its confluence with the Rapidan River upstream including all named and unnamed tributaries.
ii	Negro Run (Madison County) from its confluence with the Robinson River upstream including all named and unnamed tributaries.
ii	North Fork Thornton River from 3.2 miles above its confluence with the Thornton River upstream including all named and unnamed tributaries.
ii	Piney River (Rappahannock County) from 0.8 mile above its confluence with the North Fork Thornton River upstream including all named and unnamed tributaries.
ii	Pocosin Hollow from its confluence with the Conway River upstream including all named and unnamed tributaries.
ii	Ragged Run from 0.6 mile above its confluence with Popham Run upstream including all named and unnamed tributaries.
i	Rapidan River from Graves Mill (Route 615) upstream including all named and unnamed tributaries.
ii	Robinson River (Madison County) from river mile 26.7 to river mile 29.7.
i	Robinson River (Madison County) from river mile 29.7 upstream including all named and unnamed tributaries.
i	Rose River from river mile 2.6 upstream including all named and unnamed tributaries.
iv	Rush River (Rappahannock County) from the confluence of Big Devil Stairs (approximate river mile 10.2) upstream including all named and unnamed tributaries.
ii	Sams Run from its confluence with the Hazel River upstream including all named and unnamed tributaries.

	ii		South River from 8.9 miles above its confluence with the Rapidan River upstream including all named and unnamed tributaries.
	ii		Sprucepine Branch from its confluence with Bearwallow Creek upstream including all named and unnamed tributaries.
	i		Staunton River (Madison County) from its confluence with the Rapidan River upstream including all named and unnamed tributaries.
	ii		Strother Run from its confluence with the Rose River upstream including all named and unnamed tributaries.
	iii		Thornton River (Rappahannock County) from 25.7 miles above its confluence with the Hazel River upstream including all named and unnamed tributaries.
	ii		Wilson Run from its confluence with the Staunton River upstream including all named and unnamed tributaries.
4a			(Deleted)
4b	III	PWS	The Rappahannock River and its tributaries, to include the VEPCO Canal, from Fredericksburg's (inactive May 2000) raw water intake to points 5 miles upstream.
4c	III	PWS	Motts Run and its tributaries.
4d	III		Horsepen Run and its tributaries.
4e	III	PWS	Hunting Run and its tributaries.
4f	III		Wilderness Run and its tributaries.
4g	III		Deep Run and its tributaries (Stafford and Fauquier Counties).
4h			(Deleted)
4i	III	PWS	Mountain Run and its tributaries from Culpeper's raw water intake to points 5 miles upstream.
4j	III	PWS	White Oak Run and its tributaries from the Town of Madison's raw water intake to points 5 miles upstream.
4k	III	PWS	Rapidan River and its tributaries from Orange's raw water intake near Poplar Run to points 5 miles upstream.
4l	III	PWS	Rapidan River and its tributaries from the Rapidan Service Authority's raw water intake (just upstream of the Route 29 bridge) upstream to points 5 miles above the intake.

4m	III	PWS	Rapidan River and its tributaries from the Wilderness Shores raw water intake (Orange County - Rapidan Service Authority) to points 5 miles upstream.

9VAC25-260-470. Chowan and Dismal Swamp (Chowan River Subbasin).

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	II	NEW-21	Blackwater River and its tidal tributaries from the Virginia-North Carolina state line to the end of tidal waters at approximately State Route 611 at river mile 20.90; Nottoway River and its tidal tributaries from the Virginia-North Carolina state line to the end of tidal waters at approximately Route 674.
2	VII	NEW-21	Blackwater River from the end of tidal waters to its headwaters and its free flowing tributaries in Virginia, unless otherwise designated in this chapter.
2a	VII	PWS	Blackwater River and its tributaries from Norfolk's auxiliary raw water intake near Burdette, Virginia, to points 5 miles above the raw water intake, to include Corrowaugh Swamp to a point 5 miles above the raw water intake.
2b	III VII		Nottoway River from the end of tidal waters to its headwaters and its free flowing tributaries in Virginia, unless otherwise designated in this chapter. Swamp waters in Section 2b
			Assamoosick Swamp and its tributaries from river mile 2.50 to its headwaters.
			Black Branch Swamp from its confluence with the Nottoway River to its headwaters.
			Butterwood Creek from river mile 4.65 (near Route 622) upstream to river mile 14.59 (near Route 643).
			Cabin Point Swamp and its tributaries from its confluence with the Nottoway River to its headwaters.
			Cooks Branch from its confluence with Butterwood Creek to river mile 1.08

			Gosee Swamp and its tributaries from its confluence with the Nottoway River to river mile 6.88.
			Gravelly Run and its tributaries from its confluence with Rowanty Creek to river mile 8.56.
			Harris Swamp and its tributaries from its confluence with the Nottoway River to river mile 8.72.
			Hatcher Run and its tributaries from its confluence with Rowanty Creek to river mile 19.27 excluding Picture Branch.
			Hunting Quarter Swamp and its tributaries from its confluence with the Nottoway River to its headwaters.
			Moores and Jones Holes Swamp and tributaries from their confluence with the Nottoway River to its headwaters.
			Nebletts Mill Run and its tributaries from its confluence with the Nottoway River to its headwaters.
			Raccoon Creek and its tributaries from its confluence with the Nottoway River to its headwaters.
			Rowanty Creek and its tributaries from its confluence with the Nottoway River to Gravelly Run.
			Southwest Swamp and its tributaries from its confluence with Stony Creek to river mile 8.55.
			Three Creek and its tributaries from its confluence with the Nottoway River upstream to its headwaters at Slagles Lake.
2c	III	PWS	Nottoway River and its tributaries from Norfolk's auxiliary raw water intake near Courtland, Virginia, to points 5 miles upstream unless otherwise designated in this chapter.
	VII		Swamp waters in Section 2c
			Assamoosick Swamp and its tributaries from its confluence with the Nottoway River to river mile 2.50.
2d			(Deleted)
2e	III	PWS	Nottoway River and its tributaries from the Georgia-Pacific and the Town of Jarratt's raw water intakes near Jarratt, Virginia, to points 5 miles above the intakes.

2f	III	PWS	Nottoway River and its tributaries from the Town of Blackstone's raw water intake to points 5 miles upstream.
2g	III	PWS	Lazaretto Creek and its tributaries from Crewe's raw water intake to points 5 miles upstream.
2h	III	PWS	Modest Creek and its tributaries from Victoria's raw water intake to their headwaters.
2i	III	PWS	Nottoway River and its tributaries from the Town of Victoria's raw water intake at the Falls (about 200 feet upstream from State Route 49) to points 5 miles upstream.
2j	III	PWS	Big Hounds Creek from the Town of Victoria's auxiliary raw water intake (on Lunenburg Lake) to its headwaters.
3	III		Meherrin River and its tributaries in Virginia from the Virginia-North Carolina state line to its headwaters, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 3
			Cattail Creek and its tributaries from its confluence with Fontaine Creek to their headwaters.
			Tarrara Creek and its tributaries from its confluence with the Meherrin River to its headwaters.
			Fontaine Creek and its tributaries from its confluence with the Meherrin River to Route 301.
3a	III	PWS	Meherrin River and its tributaries from Emporia's water supply dam to points 5 miles upstream.
3b	III	PWS	Great Creek from Lawrenceville's raw water intake to a point 7.6 miles upstream.
3c	III	PWS	Meherrin River and its tributaries from Lawrenceville's raw water intake to points 5 miles upstream.
3d	III	PWS	Flat Rock Creek from Kenbridge's raw water intake upstream to its headwaters.
3e	III	PWS	Meherrin River and its tributaries from South Hill's raw water intake to points 5 miles upstream.
3f	III		Couches Creek from a point 1.6 miles downstream from the Industrial Development Authority discharge to its headwaters.

4	III		Free flowing tributaries to the Chowan River in Virginia unless otherwise designated in this section.
	VII		Swamp waters in Section 4
			Unnamed tributary to Buckhorn Creek from its headwaters to the Virginia-North Carolina state line.
			Somerton Creek and its tributaries from the Virginia-North Carolina state line at river mile 0.00 upstream to river mile 13.78.

9VAC25-260-500. Tennessee and Big Sandy River Basins (Clinch River Subbasin).

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	IV		Powell River and its tributaries from the Virginia-Tennessee state line to their headwaters; Indian Creek and Martin Creek in Virginia, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 1
	vi		Batie Creek from its confluence with the Powell River 0.8 mile upstream.
	vi		Dry Creek from its confluence with Hardy Creek to its headwaters.
	vi		Hardy Creek and its tributaries to their headwaters.
	vi		Lick Branch from its confluence with Indian Creek 1.4 miles upstream.
	vi		Martin Creek (Lee County) from the Virginia-Tennessee state line to its headwaters.
	vii		North Fork Powell River from the confluence of Straight Creek upstream to ~~its headwaters~~ the Keokee Lake dam.
	vi		Poor Valley Branch from its confluence with Martin Creek 1.4 miles upstream.
	vi		Sims Creek from its confluence with the Powell River 1.1 miles upstream to Sims Spring.
	vi		Station Creek at the boundary of the Cumberland Gap National Historical Park (river mile 2.2) 2.6 miles upstream.

vi	Wallen Creek above its confluence with the Powell River (at Rasnic Hollow) to its headwaters.
vi	White Branch from its confluence with Poor Valley Branch 0.7 mile upstream (to the Falls at Falling Water Gap).

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Matthew J. Strickler
Secretary of Natural and Historic Resources

David K. Paylor
Director
(804) 698-4000

TO: **The Members of the State Water Control Board**
FROM: **Kristen Sadtler, Division of Enforcement**
DATE: **September 28, 2021**
RE: **REPORT ON FACILITIES IN SIGNIFICANT NONCOMPLIANCE AND CHESAPEAKE BAY PRESERVATION ACT PROGRAM NOTICES OF VIOLATION**

Significant Noncompliance

Two new permittees were reported to EPA on the Quarterly Noncompliance Report as being in significant noncompliance (SNC) for the quarter ending March 31, 2021. The permittees, the facilities and the reported instances of noncompliance are as follows:

1. Permittee/Facility:	**Mohawk Industries Inc./Mohawk Industries**
Type of Noncompliance:	**Failure to Meet Permit Effluent Limit (Total Sulfide)**
City/County	Rockbridge County, Virginia
Receiving Water:	Maury River
Impaired Water:	Maury River is listed as impaired for fish consumption use due to PCBs in fish tissue. A PCB TMDL has not yet been approved for this segment.
River Basin:	Upper James River Basin
Dates of Noncompliance:	January and February 2021
Requirements Contained In:	VPDES Permit
DEQ Region:	Valley Regional Office

The Permittee attributes the violations to newly installed high pressure soap dispensers draining to the WWTP, causing foam and preventing appropriate treatment of sulfides. The facility put in place operational measures to catch soap before entering the WWTP, adding defoamer and increasing chlorine in the wastewater treatment process to oxidize sulfides. The facility has not had any exceedances of total sulfide since February 2021. DEQ's Valley Regional Office has issued a Notice of Violation to the Permittee and anticipates entering into a consent order with the Permittee to address the violations.

2. Permittee/Facility:	**US Army/Radford Army Ammunition Plant**
Type of Noncompliance:	**Failure to Meet Permit Effluent Limit (Chemical Oxygen Demand)**
City/County	Radford, Virginia
Receiving Water:	New River
Impaired Water:	New River is listed as impaired for fish consumption and recreation uses. The causes of the fish consumption impairment is PCB in fish tissue and the cause of the recreation impairment is E. coli.
River Basin:	New River Basin
Dates of Noncompliance:	February and March 2021
Requirements Contained In:	VPDES Permit
DEQ Region:	Blue Ridge Regional Office

The Permittee attributes the violations to rainfall as well as inflow and infiltration issues. In response to the violations, the Permittee formed a workgroup to determine root causes for the violations, instructed staff to reduce freeze-protection flows, and repaired several line breaks. The Permittee has not had any exceedances of chemical oxygen demand since March 2021 but did exceed its Permit effluent limit for acute toxicity in May 2021. DEQ's Blue Ridge Regional Office has issued a Warning Letter and Notice of Violation to the Permittee. DEQ anticipates entering into a consent order with the Permittee to address the violations.

Chesapeake Bay Preservation Act Program Notice of Violation

DEQ completed its review of the City of Petersburg's Chesapeake Bay Preservation Act (CBPA) Program in 2020. On April 13, 2020, DEQ transmitted the staff report of the review to the City, which identified five conditions for compliance as well as a timeframe for addressing the conditions. On June 11, 2021, DEQ issued the City a Notice of Violation for not addressing the five conditions. The five conditions address the following deficiencies: (1) the City ordinances did not require a notation on plats of several regulatory requirements, including the requirement to retain an undisturbed and vegetated 100-foot wide buffer area; (2) City ordinances were not reviewed for consistency with regulatory requirements; (3) the City did not consistently apply the steps and requirements outlined in its Chesapeake Bay Preservation Act ordinance, including delineation of the Resource Protection Areas and Resource Management Areas, implementation of site plan and plat notation requirements, and depiction of all other ordinance requirements; (4) the City did not have adequate documentation that a reliable, site specific evaluation had been conducted by applicants; and (5) the City's comprehensive plan was missing required elements. The City promptly submitted copies of adopted zoning, subdivision, erosion and sediment control, and Chesapeake Bay Preservation Act ordinances with updated language. On August 17, 2021, DEQ and the City entered into a Corrective Action Agreement, which lists the deficiencies, remaining corrective actions, and a timeframe for completing the corrective action.

DEQ has not issued any other CBPA Program NOVs from May 21, 2021 to August 24, 2021.

ENFORCEMENT ITEM SUMMARY FORM
STATE WATER CONTROL BOARD MEETING
ON SEPTEMBER 28, 2021

ITEM: Middle Mile Infrastructure, LLC for In-line Amplifier Sites along the MMI Atlantic Coast Long Haul Fiber Optic Installation Project

DEQ CONTACT: Enforcement Division
Kristen Sadtler
804-698-4149
Kristen.sadtler@deq.virginia.gov

FACILITY ADDRESS: In-line Amplifier sites are located in Campbell County, Carroll County, Fauquier County, Floyd County, Franklin County, Giles Count, Madison County, and Nelson County

TYPE OF PERMIT OR PROGRAM: VPDES Construction Stormwater

STATE WATER AFFECTED: N/A

PROPOSED BOARD ACTION: Consent Special Order w/ Civil Charges

DISCUSSION: Middle Mile Infrastructure, LLC (MMI) is a fiber optic infrastructure provider with planned lines requiring installation throughout Virginia. MMI installed in-line amplifiers (ILAs) at sites along the lines to boost the signal. On September 22, 2020 and October 1, 2, 14, and 15, 2020, DEQ staff conducted inspections of the ILA sites. During the inspections, DEQ staff observed that land-disturbing activities occurred at eight ILA sites and MMI had not registered for coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities and MMI did not have an approved stormwater management plan for the ILA sites. DEQ also observed sediment tracking onto a public roadway, temporary controls in place that were no longer needed, damaged controls that were no longer functional, denuded areas that were not stabilized, and that MMI was not performing required erosion and sediment control inspections. On November 10, 2020, DEQ issued a Notice of Violation to MMI and MMI responded promptly. The stormwater management plans for all of the ILAs except Carroll County were approved on March 4, 2021 and all of the sites except the Carroll ILA received permit coverage on July 9, 2021. The erosion and sediment control violations have been corrected.

CIVIL CHARGES/SCHEDULE OF COMPLIANCE: Section D of the Order imposes a civil charge of $46,229.38 to be deposited in the Virginia Stormwater Management Fund. Appendix A requires MMI to submit a permit application for the Carroll ILA, including an approved stormwater management plan, and obtain permit coverage.

PREVIOUS ENFORCEMENT ACTIONS: None.

PUBLIC COMMENT: The 30 day public comment period ended on September 1, 2021. No comments were received.

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ENFORCEMENT ITEM SUMMARY FORM
STATE WATER CONTROL BOARD MEETING
ON September 28, 2021

ITEM: Stephenson Associates, L.C., Stephenson Village Planned Residential Community

DEQ CONTACT: Valley Regional Office
Eric Millard
540-574-7813
Eric.Millard@deq.virginia.gov

FACILITY ADDRESS: Snowden Bridge Boulevard, Stephenson, Virginia

TYPE OF PERMIT OR PROGRAM: Unpermitted

STATE WATER AFFECTED: Hiatt Run and unnamed tributaries to Hiatt Run, Potomac River watershed; listed in 303(d) as impaired for E. coli and included in the Abrams Creek/Opequon Creek watershed TMDL for E. coli.

PROPOSED BOARD ACTION: Consent Special Order w/ Civil Charges and Injunctive Relief

BACKGROUND: Stephenson Associates, L.C. (Stephenson Associates) and Brookfield Stephenson Village, LLC (Brookfield) own and are developing a 795-acre project known as Stephenson Village Planned Residential Community, located in Stephenson, Virginia (Property). Brookfield was issued Virginia Water Protection Permit No. 05-1518 (Permit) by DEQ on January 5, 2007, and was modified on November 18, 2008 and November 15, 2018. The November 15, 2018 Permit modification included impacts related to a sewer line installation along Hiatt Run and unnamed tributaries to Hiatt Run.

DISCUSSION:

On July 30, 2019 and August 21, 2019, DEQ staff performed inspections of a sewer line project at the Property and observed unauthorized surface water impacts to 2,387 linear feet of stream channel associated with the sewer line installation project. In addition, DEQ staff observed temporary stream crossings that were not restored to pre-construction contours and erosion and sediment controls were in need or maintenance. DEQ did not receive a report of the unauthorized discharge to surface waters.

On September 3, 2019, DEQ issued Notice of Violation (NOV) No. 1909-001150 to Brookfield for the unauthorized surface water impacts and Permit violations.

On October 22, 2019, Stephenson Associates submitted a response to the NOV, which identified actions taken towards compliance and identified future corrective measures. The submittal included a Stream Restoration Plan to address the unauthorized surface water impacts. Additional documentation related to the Stream Restoration Plan was submitted by Stephenson on April 24, 2020 and July 30, 2020.

On November 12, 2019, Brookfield responded to the NOV, indicating that all activity associated with the sewer line installation project was undertaken by Stephenson Associates, and Stephenson Associates is not an entity that is owned, directed, or affiliated in any way with Brookfield, nor is

Stephenson Associates an authorized agent or contractor working for Brookfield to impact surface waters authorized by the Permit.

On May 11, 2020, Stephenson Associates initiated the restoration activities at the Property as identified in the Stream Restoration Plan.

On July 22, 2020, DEQ staff inspected the Property and verified that restoration activities in the stream restoration area were complete. Additional temporary crossings were left in place to facilitate tree watering in the stream restoration area.

On September 3, 2020, Stephenson Associates provided documentation, including invoices, demonstrating the financial expense of the stream restoration activities, totaling $137,231.27 with an anticipated additional $5,000 in future monitoring costs.

CIVIL CHARGES/SUPPLEMENTAL ENVIRONMENTAL PROJECT: Section D of the Order imposes civil charges of $55,143 to be deposited into the Virginia Environmental Emergency Fund.

Injunctive relief included in Appendix A of the Order requires:
- Submittal of stream restoration monitoring reports in accordance with the Stream Restoration Plan by December 31, 2021 and December 21, 2022;
- Repair of temporary stream crossings within 15 days of the completion of tree plantings.

PREVIOUS ENFORCEMENT ACTIONS: None

PUBLIC COMMENT: The Consent Order was signed on May 4, 2021. A public notice for this proposed consent order ran on June 7, 2021 in the Winchester Star, the *Virginia Register,* and on the Department's website. The 30 day public comment period ended on July 7, 2021. No public comments were received during the comment period.

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ENFORCEMENT ITEM SUMMARY FORM
STATE WATER CONTROL BOARD MEETING
ON SEPTEMBER 28, 2021

ITEM: 6801 Woolridge Road – Moseley LP for Magnolia Green Development (Magnolia Green)

DEQ CONTACT: Enforcement Division
Frank Lupini
804-527-5093
Frank.Lupini@deq.virginia.gov

FACILITY ADDRESS: North of U.S. Route 360 (Hull Street Road) and west of State Route 667 (Otterdale Road) in Chesterfield County, Virginia. (Property)

TYPE OF PERMIT OR PROGRAM: VWP Permit Nos. 16-0777 & 06-2748

STATE WATER AFFECTED: Blackman Creek and Blackman Creek, UT– James River Basin (Appomattox River Subbasin). During the 2014 305(b)/303(d) Integrated Water Quality Assessment, Blackman Creek was impaired of the Aquatic Life Use due to dissolved oxygen and pH exceedances; natural conditions are suspected. The Fish Consumption, Recreation, Public Water Supply, and Wildlife Uses were not assessed. The tributary was not assessed for any designated use.

PROPOSED BOARD ACTION: Consent Special Order w/ Civil Charges

BACKGROUND: 6801 Woolridge Road – Moseley LP (WRMLP) owns and is developing the Property in Chesterfield County, Virginia. On December 10, 2007, DEQ issued permit VWP permit 06-2748 to Magnolia Green Development, LLC. The Permit was transferred twice, first to 6801 Woolridge Road – Moseley TRS, LLC on June 15, 2009, and again to 6801 Woolridge Road – Moseley LP on October 23, 2013, by Change of Ownership Agreement Forms submitted to DEQ. Permit 06-2748 authorized the permanent impacts of 2.64 acres of forested wetlands, 0.02 acres of emergent wetlands, and 11,147 linear feet of stream channel. Additionally this project had been authorized to convert 2.39 acres of forested wetlands to emergent wetlands and temporarily impact 0.41 acres of forested wetlands and 1,065 linear feet of stream channel. On March 14, 2017, DEQ issued VWP permit 16-0777 for Phase III. The Permit was modified four times, with the most recent modification completed on September 22, 2020. The last Permit modification authorizes permanent impacts to no more than 2.02 acres of forested wetlands, 0.02 acre of emergent wetland, and 7,065 linear feet of stream bed, and the permanent conversion of no more than 2.22 acres of forested wetland to emergent wetland. In addition, the Permit authorizes temporary impacts to no more than 0.15 acre emergent wetland and 384 linear feet of stream bed.

DISCUSSION: On August 17, 2018 the Department conducted a VWPP compliance inspection at the Property and noted approximately 610 linear feet of stream bed was modified and is no longer functioning as a stream. These impacts were not authorized. In addition, Department staff observed that erosion and sedimentation controls were not maintained in good working order or had failed in numerous sections of the project. These violations resulted in the discharge of sediment to surface waters having a significant impact to approximately 1,141 linear feet of stream bed and approximately 0.20 acre of forested wetlands.

On September 14, 2018, DEQ issued NOV No. 1809-000865 for the above referenced violations. On September 28, 2018 WRMLP submitted a corrective action plan which was approved by the Department.

On November 4, 2020, WRMLP informed DEQ that additional unauthorized impacts, were taken due to the construction of the Phase 3C sewer extension. Approximately 19,515 square feet (0.45 acres) of palustrine forested wetlands and 23 linear feet of stream channel were impacted. On December 9, 2020, WRMLP provided additional information and reported to DEQ an additional 20-25 linear feet of unpermitted stream channel impacts.

On December 22, 2020, the Department issued NOV No. 2012-001612 for these violations. On December 8, 2020, the Department approved a corrective action plan.

CIVIL CHARGES/SUPPLEMENTAL ENVIRONMENTAL PROJECT: Section D of the Order imposes a civil charge of $59,975 to be deposited in the Virginia Environmental Emergency Response Fund.

PREVIOUS ENFORCEMENT ACTIONS: On April 13, 2018, the State Water Control Board issued a Consent Order to 6801 Woolridge Road – Moseley LP for impacts to wetlands (0.74 acre) and streams (2,115 linear feet) that were not authorized by the Permit. The Consent Order assessed a civil charge of $56,062, a corrective action plan, and a deed restriction. All terms of the consent order were complied with.

PUBLIC COMMENT: The Consent Order was signed on July 14, 2021. A public notice for this proposed Consent Order was run on August 11, 2021, in *Style Weekly*, in the *Virginia Register* on August 16, 2021, and on the Department's website. The 30 day public comment period ends on September 16, 2021. DEQ will update the Board if any comments are received.

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from DEQ contact

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MEMORANDUM

TO: State Water Control Board Members

FROM: Karen M. Doran, Clean Water Financing and Assistance Program

DATE: August 26, 2021 Karen M Doran

SUBJECT: Clean Water Financing and Assistance Program – Program Update

Purpose

The purpose of this memo is to inform the State Water Control Board of one update within the Clean Water Financing and Assistance Program (CWFAP) regarding Alexandria Combined Sewer Overflow (CSO) funding.

Alexandria Renew CSO update

During the 2021 session, the General Assembly authorized $25 million in bond proceeds through the Department of Environmental Quality to the state's CSO Fund to provide a $25 million grant to the City of Alexandria to pay a portion of the capital costs for their CSO project. A grant agreement has been executed to establish the grant recipient as the City of Alexandria and the grant user as Alexandria Renew Enterprises which serves as the sanitation authority for the City. The CWFAP will proceed with the disbursement of the grant funds in the amount of $25 million for the Alexandria CSO project.

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MEMORANDUM

TO: State Water Control Board Members

FROM: Karen M. Doran, Clean Water Financing and Assistance Program

DATE: August 26, 2021 Karen M Doran

SUBJECT: FY 2022 Virginia Clean Water Revolving Loan Fund Final Authorizations
Southwest Virginia Pilot Program Projects

Purpose

Title IV of the Clean Water Act requires the annual submission of a Project Priority List and Intended Use Plan in conjunction with Virginia's Clean Water Revolving Loan Fund (VCWRLF) Capitalization Grant application. Section 62.1-229 of Chapter 22, Code of Virginia, authorizes the Board to establish to whom loans are made, the loan amounts, and repayment terms. The next step in this process is for the Board to authorize the execution of funding agreements for the Southwest Virginia Pilot Program Projects.

Background

The Clean Water Financing and Assistance Program (CWFAP) developed the Southwest Virginia Pilot Program to address a critical need for wastewater infrastructure funding in Southwest Virginia. In phase one of the program, CWFAP will provide 75% principal forgiveness to localities within DEQ's Southwest Regional Office boundary for completion of a Sewer System Evaluation Survey (SSES) that identifies high priority repairs to reduce collection system inflow and infiltration (I/I) and/or sanitary sewer overflows (SSOs). The locality will provide 25% matching funds. Since SSES work is best conducted during dry weather months, CWFAP proceeded with application evaluation, tentative approval, and the public comment period rapidly in order to request final approval from the Board during the September 28, 2021 meeting and to allow SSES initiation during favorable weather conditions.

On June 7, 2021, CWFAP staff solicited applications for SSES work from localities and wastewater authorities within DEQ's Southwest Regional Office boundary as part of the Southwest Virginia Pilot Program. July 2, 2021 was established as the deadline for receiving applications. Based on this solicitation, DEQ received 16 SSES applications requesting $1,141,125.

By memorandum dated July 19, 2021, the Director of DEQ tentatively approved the list of 16 projects for which funding assistance was requested from available and anticipated FY 2022 resources and authorized staff to proceed to public comment. A listing of the projects and a brief description of each is included in Attachment A. A public meeting was convened on August 20th. Notice of the meeting was posted on the Virginia Regulatory Town Hall and DEQ's CWFAP website. No comments were received. The remainder of the projects for the FY 2022 VCWRLF Funding List will be reviewed and evaluated over the next two months. Approval to proceed to public comment will be sought and the Board will consider the full FY 2022 VCWRLF Funding List and any comments at the December 14, 2021 meeting.

Discussion

The staff has conducted initial meetings with the FY 2022 Southwest Virginia Pilot Program recipients and has finalized the recommended funding amounts in accordance with the Board's guidelines. No changes from the tentative approval list previously approved are being recommended. The projects listed in the table below are submitted for Board consideration.

Congress has not finalized the federal State Revolving Fund appropriation for FY 2022, however the VCWRLF continues to maintain very healthy account balances. In addition, federal funds remained similar to last year and we fully expect at least level funding moving forward.

FY 2022 Proposed Authorizations - SW VA Pilot Program Projects			
	Applicant	*Project Type*	*Funding Amount*
1	Dickenson County Public Service Authority	SSES	$67,500
2	Town of Tazewell	SSES	$75,000
3	Town of Marion	SSES	$52,500
4	Lee County Public Service Authority	SSES	$75,000
5	Town of Saltville	SSES	$75,000
6	Town of St. Paul	SSES	$75,000
7	Town of Chilhowie	SSES	$64,125
8	Town of Lebanon	SSES	$75,000
9	Town of Rural Retreat	SSES	$75,000
10	Town of Richlands	SSES	$75,000
11	Town of Cedar Bluff	SSES	$57,000
12	Town of Abingdon	SSES	$75,000
13	Smyth County	SSES	$75,000
14	Town of Honaker	SSES	$75,000
15	Town of Pennington Gap	SSES	$75,000
16	City of Norton	SSES	$75,000
TOTAL			**$1,141,125**

Staff Recommendation

Authorize the execution of funding agreements for the FY22 VCWRLF Southwest Virginia Pilot Program projects and principal forgiveness funding amounts listed above.

Attachment A

FY 2022 Southwest Virginia Pilot Program Applicants	Amount Requested	Project Description	Projected SSES Start
Dickenson County Public Service Authority	$ 67,500.00	Sewer System Evaluation Study and Asset Management Plan for the Town of Haysi system including 28 miles of collection lines and 143 manholes managed by DCPSA.	December 2021
Town of Tazewell	$ 75,000.00	**Evaluation of Town's manholes and collection system, with manhole** improvement recommendations, manhole rehabilitation recommendations, and a conventional SSES for areas of the existing collection system not situated beneath rivers/streams.	Fall 2021
Town of Marion	$ 52,500.00	Sewer System Evaluation Survey in the Town of Marion with a study area in the vicinity of Hollow Road, Oak Street, Dogwood Street, Fern Street, Park Street, and Prater Lane within the Town limits.	December 2021
Lee County Public Service Authority	$ 75,000.00	To conduct an SSES within both the Dryden and Rose Hill sewer sheds to determine locations of RDII entering the system and to establish improvement projects to reduce RDII and overall effluent discharges from the WWTPs for each sewershed.	October 2021
Town of Saltville	$ 75,000.00	An SSES of the Government Road sewer shed within Saltville's system in order to determine locations of RDII entrance to the system and to establish improvement projects that will reduce RDII, increasing the sewer shed and WWTP's available capacities.	October 2021
Town of St. Paul	$ 75,000.00	An SSES of the Town's entire sewer system to determine locations of RDII. These determinations will be utiiized to establish proposed improvement projects through the sewer system in an effort to reduce RDII, increase the Town's WWTP capacity, and reduce total treated effluent discharges.	October 2021
Town of Chilhowie	$ 64,125.00	To conduct an SSES to address I/I issues focusing on the Seven Mile Ford interceptor sewer shed.	November 2021
Town of Lebanon	$ 75,000.00	To conduct an SSES throughout the Town's entire system to assess the areas where inflow and infiltration are potentially entering the system, and to establish recommended improvement projects that will decrease I&I, therefore increasing the Town's sewer capacity and reducing wastewater treatment costs.	October 2021
Town of Rural Retreat	$ 75,000.00	To conduct an SSES to determine locations and estimated amounts of RDII entering the Northern Sewer Shed of the Town's sewer system; this determination will allow for planning of future improvement projects to reduce RDII, increasing the Town's system and WWTP capacities, thus bringing the WWTP into compliance with regards to treatment capacity and reducing sewer system overflows.	October 2021
Town of Richlands	$ 75,000.00	Evaluation of the Town's manholes and collection system, with manhole improvement recommendations, manhole rehabilitation recommendations, and a conventional SSES for areas of the existing collection system that are not situated beneath rivers/streams.	Fall 2021
Town of Cedar Bluff	$ 57,000.00	To conduct an SSES in the existing sewer system of Cedar Bluff, including gravity sewer lines and manholes.	October 2021
Town of Abingdon	$ 75,000.00	To conduct an SSES of the Porterfield Highway Collector sewershed in the northwest portion of the Town's collection system as well as funds for an iTracker study in two of the sewersheds from the FY21 SSES Pilot Program. The Porterfield Highway Collector sewershed is composed of 70,260 linear feet of sanitary sewer pipe, ranging from 4-12 inches, and 335 manholes.	November 2021
Smyth County	$ 75,000.00	To conduct an SSES of the Staley Creek basin in Smyth County, consisting of 19,840 linear feet of pipe and 116 manholes.	January 2022
Town of Honaker	$ 75,000.00	Concurrent with pending WWTP improvements, the Town seeks to reassess its system through traditional SSES methods and to identify and/or confirm improvements that may reduce overall high groundwater and wet-weather flows at the WWTP; and reduce the likelihood of overflow occurrence.	August 2021
Town of Pennington Gap	$ 75,000.00	The Town seeks to conduct an SSES survey of the entire collection system, chronicle assets within GIS, and conduct system mapping to complete mapping for all future uses.	August 2021
City of Norton	$ 75,000.00	To conduct an updated SSES to identify improvements to be made in the primary collection area to remediate the significant inflow and infiltration continuously entering the system - not just during periods of high groundwater or precipitation.	October 2021

Total Requested $ 1,141,125.00