



VIRGINIA

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VIRGINIA REGISTER INFORMATION PAGE

THE VIRGINIA REGISTER OF REGULATIONS is an official state publication issued every other week throughout the year. Indexes are published quarterly, and are cumulative for the year. The *Virginia Register* has several functions. The new and amended sections of regulations, both as proposed and as finally adopted, are required by law to be published in the *Virginia Register*. In addition, the *Virginia Register* is a source of other information about state government, including petitions for rulemaking, emergency regulations, executive orders issued by the Governor, and notices of public hearings on regulations.

ADOPTION, AMENDMENT, AND REPEAL OF REGULATIONS

An agency wishing to adopt, amend, or repeal regulations must first publish in the *Virginia Register* a notice of intended regulatory action; a basis, purpose, substance and issues statement; an economic impact analysis prepared by the Department of Planning and Budget; the agency's response to the economic impact analysis; a summary; a notice giving the public an opportunity to comment on the proposal; and the text of the proposed regulation.

Following publication of the proposal in the *Virginia Register*, the promulgating agency receives public comments for a minimum of 60 days. The Governor reviews the proposed regulation to determine if it is necessary to protect the public health, safety and welfare, and if it is clearly written and easily understandable. If the Governor chooses to comment on the proposed regulation, his comments must be transmitted to the agency and the Registrar no later than 15 days following the completion of the 60-day public comment period. The Governor's comments, if any, will be published in the *Virginia Register*. Not less than 15 days following the completion of the 60-day public comment period, the agency may adopt the proposed regulation.

The Joint Commission on Administrative Rules (JCAR) or the appropriate standing committee of each house of the General Assembly may meet during the promulgation or final adoption process and file an objection with the Registrar and the promulgating agency. The objection will be published in the *Virginia Register*. Within 21 days after receipt by the agency of a legislative objection, the agency shall file a response with the Registrar, the objecting legislative body, and the Governor.

When final action is taken, the agency again publishes the text of the regulation as adopted, highlighting all changes made to the proposed regulation and explaining any substantial changes made since publication of the proposal. A 30-day final adoption period begins upon final publication in the *Virginia Register*.

The Governor may review the final regulation during this time and, if he objects, forward his objection to the Registrar and the agency. In addition to or in lieu of filing a formal objection, the Governor may suspend the effective date of a portion or all of a regulation until the end of the next regular General Assembly session by issuing a directive signed by a majority of the members of the appropriate legislative body and the Governor. The Governor's objection or suspension of the regulation, or both, will be published in the *Virginia Register*. If the Governor finds that changes made to the proposed regulation have substantial impact, he may require the agency to provide an additional 30-day public comment period on the changes. Notice of the additional public comment period required by the Governor will be published in the *Virginia Register*.

The agency shall suspend the regulatory process for 30 days when it receives requests from 25 or more individuals to solicit additional public comment, unless the agency determines that the changes have minor or inconsequential impact.

A regulation becomes effective at the conclusion of the 30-day final adoption period, or at any other later date specified by the promulgating agency, unless (i) a legislative objection has been filed, in which event the regulation, unless withdrawn, becomes effective on the date specified, which shall be after the expiration of the 21-day objection period; (ii) the Governor exercises his authority to require the agency to provide for additional public comment, in which event the regulation,

unless withdrawn, becomes effective on the date specified, which shall be after the expiration of the period for which the Governor has provided for additional public comment; (iii) the Governor and the General Assembly exercise their authority to suspend the effective date of a regulation until the end of the next regular legislative session; or (iv) the agency suspends the regulatory process, in which event the regulation, unless withdrawn, becomes effective on the date specified, which shall be after the expiration of the 30-day public comment period and no earlier than 15 days from publication of the readopted action.

A regulatory action may be withdrawn by the promulgating agency at any time before the regulation becomes final.

FAST-TRACK RULEMAKING PROCESS

Section 2.2-4012.1 of the Code of Virginia provides an exemption from certain provisions of the Administrative Process Act for agency regulations deemed by the Governor to be noncontroversial. To use this process, Governor's concurrence is required and advance notice must be provided to certain legislative committees. Fast-track regulations will become effective on the date noted in the regulatory action if no objections to using the process are filed in accordance with § 2.2-4012.1.

EMERGENCY REGULATIONS

Pursuant to § 2.2-4011 of the Code of Virginia, an agency, upon consultation with the Attorney General, and at the discretion of the Governor, may adopt emergency regulations that are necessitated by an emergency situation. An agency may also adopt an emergency regulation when Virginia statutory law or the appropriation act or federal law or federal regulation requires that a regulation be effective in 280 days or less from its enactment. The emergency regulation becomes operative upon its adoption and filing with the Registrar of Regulations, unless a later date is specified. Emergency regulations are limited to no more than 18 months in duration; however, may be extended for six months under certain circumstances as provided for in § 2.2-4011 D. Emergency regulations are published as soon as possible in the *Register*. During the time the emergency status is in effect, the agency may proceed with the adoption of permanent regulations through the usual procedures. To begin promulgating the replacement regulation, the agency must (i) file the Notice of Intended Regulatory Action with the Registrar within 60 days of the effective date of the emergency regulation and (ii) file the proposed regulation with the Registrar within 180 days of the effective date of the emergency regulation. If the agency chooses not to adopt the regulations, the emergency status ends when the prescribed time limit expires.

STATEMENT

The foregoing constitutes a generalized statement of the procedures to be followed. For specific statutory language, it is suggested that Article 2 (§ 2.2-4006 et seq.) of Chapter 40 of Title 2.2 of the Code of Virginia be examined carefully.

CITATION TO THE VIRGINIA REGISTER

The *Virginia Register* is cited by volume, issue, page number, and date. **29:5 VA.R. 1075-1192 November 5, 2012**, refers to Volume 29, Issue 5, pages 1075 through 1192 of the *Virginia Register* issued on November 5, 2012.

The Virginia Register of Regulations is published pursuant to Article 6 (§ 2.2-4031 et seq.) of Chapter 40 of Title 2.2 of the Code of Virginia.

Members of the Virginia Code Commission: **John S. Edwards**, Chair; **James M. LeMunyon**, Vice Chair, **Gregory D. Habeeb**; **Ryan T. McDougle**; **Pamela S. Baskerville**; **Robert L. Calhoun**; **Carlos L. Hopkins**; **E.M. Miller, Jr.**; **Thomas M. Moncure, Jr.**; **Christopher R. Nolen**; **Timothy Oksman**; **Charles S. Sharp**; **Robert L. Tavenner**.

Staff of the Virginia Register: **Jane D. Chaffin**, Registrar of Regulations; **Karen Perrine**, Assistant Registrar; **Anne Bloomsburg**, Regulations Analyst; **Rhonda Dyer**, Publications Assistant; **Terri Edwards**, Operations Staff Assistant.

PUBLICATION SCHEDULE AND DEADLINES

This schedule is available on the *Register's* Internet home page (<http://register.dls.virginia.gov>).

June 2015 through August 2016

| <u>Volume: Issue</u> | <u>Material Submitted By Noon*</u> | <u>Will Be Published On</u> |
|----------------------|--------------------------------------|-----------------------------|
| 31:22 | June 10, 2015 | June 29, 2015 |
| 31:23 | June 24, 2015 | July 13, 2015 |
| 31:24 | July 8, 2015 | July 27, 2015 |
| 31:25 | July 22, 2015 | August 10, 2015 |
| 31:26 | August 5, 2015 | August 24, 2015 |
| 32:1 | August 19, 2015 | September 7, 2015 |
| 32:2 | September 2, 2015 | September 21, 2015 |
| 32:3 | September 16, 2015 | October 5, 2015 |
| 32:4 | September 30, 2015 | October 19, 2015 |
| 32:5 | October 14, 2015 | November 2, 2015 |
| 32:6 | October 28, 2015 | November 16, 2015 |
| 32:7 | November 10, 2015 (Tuesday) | November 30, 2015 |
| 32:8 | November 24, 2015 (Tuesday) | December 14, 2015 |
| 32:9 | December 9, 2015 | December 28, 2015 |
| 32:10 | December 21, 2015 (Monday) | January 11, 2016 |
| 32:11 | January 6, 2016 | January 25, 2016 |
| 32:12 | January 20, 2016 | February 8, 2016 |
| 32:13 | February 3, 2016 | February 22, 2016 |
| 32:14 | February 17, 2016 | March 7, 2016 |
| 32:15 | March 2, 2016 | March 21, 2016 |
| 32:16 | March 16, 2016 | April 4, 2016 |
| 32:17 | March 30, 2016 | April 18, 2016 |
| 32:18 | April 13, 2016 | May 2, 2016 |
| 32:19 | April 27, 2016 | May 16, 2016 |
| 32:20 | May 11, 2016 | May 30, 2016 |
| 32:21 | May 25, 2016 | June 13, 2016 |
| 32:22 | June 8, 2016 | June 27, 2016 |
| 32:23 | June 22, 2016 | July 11, 2016 |
| 32:24 | July 6, 2016 | July 25, 2016 |
| 32:25 | July 20, 2016 | August 8, 2016 |
| 32:26 | August 3, 2016 | August 22, 2016 |

*Filing deadlines are Wednesdays unless otherwise specified.

PETITIONS FOR RULEMAKING

TITLE 2. AGRICULTURE

BOARD OF AGRICULTURE AND CONSUMER SERVICES

Agency Decision

Title of Regulation: **2VAC5-317. Regulations for the Enforcement of the Noxious Weeds Law.**

Statutory Authority: § 3.2-802 of the Code of Virginia.

Name of Petitioner: Dean Amel, Arlington County Urban Forestry Commission.

Nature of Petitioner's Request: Petitioner urges the Department of Agriculture and Consumer Services to include in 2VAC5-317 a more comprehensive list of nonnative invasive species based on the Department of Conservation and Recreation list of invasive alien plant species in our state. Species on this list currently not offered for sale should be banned from future sales; plants on this list that are currently for sale should be phased out from sale over time. If the Commonwealth of Virginia is unwilling to take such steps to control nonnative invasive species, then local jurisdictions should be permitted to undertake eradication and suppression efforts.

Agency Decision: Request denied.

Statement of Reason for Decision: The Board of Agriculture and Consumer Services denies the petitioner's request for rulemaking for the following reasons:

The Regulations for Enforcement of the Noxious Weeds Law, 2VAC5-317, was established pursuant to Virginia's Noxious Weeds Law (§ 3.2-800 et seq. of the Code of Virginia). The law defines the term "noxious weed" as "...any living plant, not widely disseminated, or part thereof, declared by the Board through regulations under this chapter, to be detrimental to crops, surface waters, including lakes, or other desirable plants, livestock, land, or other property, or to be injurious to public health or the economy." The vast majority of the invasive plant species on the Department of Conservation and Recreation's Virginia Invasive Plant Species List do not meet the statutory definition as noxious weeds, thus the board's denial of the petitioner's request.

The board also points out that the regulation already provides a mechanism, through the Noxious Weeds Advisory Committee, for the review and recommendation of candidate species for classification as Tier 1 or Tier 2 noxious weeds.

The Noxious Weeds Law does not include specific provisions that allow localities to ban the sale and distribution of plant species within their boundaries.

Agency Contact: Andres Alvarez, Director, Division of Consumer Protection, Department of Agriculture and Consumer Services, P.O. Box 1163, Richmond, VA 23218, telephone (804) 225-3821, or email andres.alvarez@vdacs.virginia.gov.

VA.R. Doc. No. R15-22; Filed June 3, 2015, 11:47 a.m.

Agency Decision

Title of Regulation: **2VAC5-317. Regulations for the Enforcement of the Noxious Weeds Law.**

Statutory Authority: § 3.2-802 of the Code of Virginia.

Name of Petitioner: Kurt Louis, Arlington County Parks and Natural Resources Division.

Nature of Petitioner's Request: Petitioner urges the Department of Agriculture and Consumer Services to reevaluate the criteria by which plants are classified as noxious weeds in 2VAC5-317 and incorporate the following changes into the regulation:

- Utilize the Virginia Department of Conservation and Recreation's (DCR) most current list of Invasive Alien Plant Species of Virginia as the basis for determining inclusion on the noxious weeds list. Using this well-researched, science-based, comprehensive list as the basis for state regulation will have a far greater impact at limiting the introduction, dissemination and spread of invasive plants.
- Any species classified as highly or moderately invasive in DCR's most recent "Invasive and Alien Plant Species of Virginia" list, that are not currently in commercial production in Virginia, should be placed on the Tier 1 List of Noxious Weeds.
- Listing as a "Tier 1 noxious weed" forbids sale and movement of certain invasive plants known to do extensive damage.
- Any species classified as highly or moderately invasive in DCR's most recent "Invasive and Alien Plant Species of Virginia" list, that are currently in commercial production in Virginia, should be placed on the Tier 2 List of Noxious Weeds for a defined number of years to allow growers a chance to start producing alternative plants for sale.
- Require labeling of commercially available noxious weeds during the time that they are still permitted to be sold on the Tier 2 List (as noted above). The label shall include a warning stating that the species are invasive and shall include a listing of noninvasive alternative plant species.
- Phase out any species listed on the DCR list as invasive from commercial sale. For trees, growers should be prohibited from starting new plants once listed. Trees currently in production would be allowed to be sold with a warning (see above), unless quarantined or restricted for other reasons. Other plants that are currently in production in Virginia may be continued to be sold for a defined number of years, unless quarantined or restricted for other reasons.
- Address whether successful eradication is likely/unlikely, and successful suppression is likely/feasible (as specified in

Petitions for Rulemaking

definitions of Tier 1/Tier 2 Noxious Weeds in the regulation as currently proposed by VDACS) on a species-by-species basis, grouped as subcategories within Arlington's proposed definitions of Tier 1 and Tier 2 species (above).

- Permit local jurisdictions to create lists of invasive plant species to be banned from sale and distribution within their jurisdiction.

Agency Decision: Request denied.

Statement of Reason for Decision: The Board of Agriculture and Consumer Services denies the petitioner's request for rulemaking for the following reasons:

The Regulations for Enforcement of the Noxious Weeds Law, 2VAC5-317, was established pursuant to Virginia's Noxious Weeds Law (§ 3.2-800 et seq. of the Code of Virginia). The law defines the term "noxious weed" as "...any living plant, not widely disseminated, or part thereof, declared by the Board through regulations under this chapter, to be detrimental to crops, surface waters, including lakes, or other desirable plants, livestock, land, or other property, or to be injurious to public health or the economy." The vast majority of the invasive plant species on the Department of Conservation and Recreation's Virginia Invasive Plant Species List do not meet the statutory definition as noxious weeds, thus the board's denial of the petitioner's request.

The board also points out that the regulation already provides a mechanism, through the Noxious Weeds Advisory Committee, for the review and recommendation of candidate species for classification as Tier 1 or Tier 2 noxious weeds.

The Noxious Weeds Law does not include specific provisions that allow localities to ban the sale and distribution of plant species within their boundaries.

Agency Contact: Andres Alvarez, Director, Division of Consumer Protection, Department of Agriculture and Consumer Services, P.O. Box 1163, Richmond, VA 23218, telephone (804) 225-3821, or email andres.alvarez@vdacs.virginia.gov.

VA.R. Doc. No. R15-23; Filed June 3, 2015, 11:47 a.m.

NOTICES OF INTENDED REGULATORY ACTION

TITLE 12. HEALTH

STATE BOARD OF HEALTH

Notice of Intended Regulatory Action

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the State Board of Health intends to consider amending **12VAC5-230, State Medical Facilities Plan**. The purpose of the proposed action is to update definitions related to cardiac catheterization and update the occupancy standard utilized for determining the need for new nursing home beds. This Notice of Intended Regulatory Action serves as the report of the findings of the regulatory review pursuant to § 2.2-4007.1 of the Code of Virginia.

The agency does not intend to hold a public hearing on the proposed action after publication in the Virginia Register.

Statutory Authority: § 32.1-102.2 of the Code of Virginia.

Public Comment Deadline: July 31, 2015.

Agency Contact: Susan Horn, Policy Analyst, Department of Health, 3600 West Broad Street, Richmond, VA 23230, telephone (804) 367-2157, FAX (804) 527-4502, or email susan.horn@vdh.virginia.gov.

VA.R. Doc. No. R15-4417; Filed May 29, 2015, 12:22 p.m.

Notice of Intended Regulatory Action

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the State Board of Health intends to consider promulgating **12VAC5-525, Regulations for Physician Assistant Scholarships**. The purpose of the proposed action is to implement § 32.1-122.6:03 of the Code of Virginia by establishing a physician assistant scholarship program for students who intend to enter an accredited physician assistant program.

The agency does not intend to hold a public hearing on the proposed action after publication in the Virginia Register.

Statutory Authority: § 32.1-122.6:03 of the Code of Virginia.

Public Comment Deadline: July 31, 2015.

Agency Contact: Adrienne McFadden, M.D., J.D., Director, Office of Minority Health and Health Equity, Department of Health, 109 Governor Street, Richmond, VA 23219, telephone (804) 864-7425, FAX (804) 864-7440, or email adrienne.mcfadden@vdh.virginia.gov.

VA.R. Doc. No. R15-4416; Filed May 29, 2015, 12:02 p.m.

DEPARTMENT OF MEDICAL ASSISTANCE SERVICES

Notice of Intended Regulatory Action

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the Board of Medical Assistance Services intends to consider amending **12VAC30-30, Groups Covered and Agencies Responsible for Eligibility Determination; 12VAC30-50, Amount, Duration, and**

Scope of Medical and Remedial Care Services; and 12VAC30-135, Demonstration Waiver Services. The purpose of the proposed action is to move the family planning eligibility group from the demonstration waiver to the State Plan for Medical Assistance as approved by the Centers for Medicare & Medicaid Services. This action creates a group of eligible persons at 200% of the federal poverty level and establishes the coverage of designated family planning services.

The agency does not intend to hold a public hearing on the proposed action after publication in the Virginia Register.

Statutory Authority: § 32.1-325 of the Code of Virginia; 42 USC § 1396 et seq.

Public Comment Deadline: July 29, 2015.

Agency Contact: Victoria Simmons, Regulatory Coordinator, Department of Medical Assistance Services, 600 East Broad Street, Suite 1300, Richmond, VA 23219, telephone (804) 371-6043, FAX (804) 786-1680, or email victoria.simmons@dmas.virginia.gov.

VA.R. Doc. No. R15-2866; Filed May 29, 2015, 7:45 a.m.

TITLE 18. PROFESSIONAL AND OCCUPATIONAL LICENSING

BOARD FOR CONTRACTORS

Notice of Intended Regulatory Action

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the Board for Contractors intends to consider amending **18VAC50-22, Board for Contractors Regulations**. The purpose of the proposed action is to amend the application requirements for licensure to improve the integrity of documentation received from applicants seeking licensure.

The agency intends to hold a public hearing on the proposed action after publication in the Virginia Register.

Statutory Authority: §§ 54.1-201 and 54.1-1102 of the Code of Virginia.

Public Comment Deadline: July 29, 2015.

Agency Contact: Eric L. Olson, Executive Director, Board for Contractors, 9960 Mayland Drive, Suite 400, Richmond, VA 23233, telephone (804) 367-2785, FAX (866) 430-1033, or email contractors@dpor.virginia.gov.

VA.R. Doc. No. R15-4414; Filed May 29, 2015, 11:45 a.m.

Notice of Intended Regulatory Action

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the Board for Contractors intends to consider amending **18VAC50-30, Individual License and Certification Regulations**. The purpose of the proposed

Notices of Intended Regulatory Action

action is to amend the application requirements for individual licensure and certification to improve the integrity of documentation received from applicants seeking licensure.

The agency intends to hold a public hearing on the proposed action after publication in the Virginia Register.

Statutory Authority: §§ 54.1-201 and 54.1-1102 of the Code of Virginia.

Public Comment Deadline: July 29, 2015.

Agency Contact: Eric L. Olson, Executive Director, Board for Contractors, 9960 Mayland Drive, Suite 400, Richmond, VA 23233, telephone (804) 367-2785, FAX (866) 430-1033, or email contractors@dpor.virginia.gov.

VA.R. Doc. No. R15-4415; Filed May 29, 2015, 11:45 a.m.



TITLE 22. SOCIAL SERVICES

STATE BOARD OF SOCIAL SERVICES

Notice of Intended Regulatory Action

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the State Board of Social Services intends to consider repealing **22VAC40-80, General Procedures and Information for Licensure**, and promulgating a comprehensive new regulation **22VAC40-81, General Information and Procedures for Licensure**. The current regulation was promulgated in 1984 and has undergone amendment several times to incorporate statutory changes. There has not been, however, any comprehensive revision to incorporate changed practices and procedures. Repeal of the existing regulation and adoption of a new regulation is the most efficient and effective way to incorporate all applicable requirements from the Code of Virginia and make the necessary changes to achieve clarity and consistency with current practices and procedures.

The agency does not intend to hold a public hearing on the proposed action after publication in the Virginia Register.

Statutory Authority: §§ 63.2-217, 63.2-1732, 63.2-1733, and 63.2-1734 of the Code of Virginia.

Public Comment Deadline: July 29, 2015.

Agency Contact: Janice Sigler, Program Consultant, Department of Social Services, 801 East Main Street, Richmond, VA 23219, telephone (804) 726-7901, FAX (804) 726-7132, or email jan.sigler@dss.virginia.gov.

VA.R. Doc. No. R15-4418; Filed June 1, 2015, 3:35 p.m.

REGULATIONS

For information concerning the different types of regulations, see the Information Page.

Symbol Key

Roman type indicates existing text of regulations. Underscored language indicates proposed new text. Language that has been stricken indicates proposed text for deletion. Brackets are used in final regulations to indicate changes from the proposed regulation.

TITLE 8. EDUCATION

STATE BOARD OF EDUCATION

Final Regulation

REGISTRAR'S NOTICE: The Board of Education is claiming an exemption from Article 2 of the Administrative Process Act in accordance with § 2.2-4006 A 4 a of the Code of Virginia, which excludes regulations that are necessary to conform to changes in Virginia statutory law where no agency discretion is involved. The Board of Education will receive, consider, and respond to petitions from any interested person at any time with respect to reconsideration or revision.

Title of Regulation: **8VAC20-81. Regulations Governing Special Education Programs for Children with Disabilities in Virginia (amending 8VAC20-81-30, 8VAC20-81-90, 8VAC20-81-100).**

Statutory Authority: §§ 22.1-16 and 22.1-214 of the Code of Virginia; 34 CFR Part 300.

Effective Date: July 29, 2015.

Agency Contact: John Eisenberg, Assistant Superintendent for Special Education and Student Services, Department of Education, P.O. Box 2120, Richmond, VA 23218, telephone (804) 225-2711, or email john.eisenberg@doe.virginia.gov.

Summary:

The amendments (i) require each local school board to provide free and appropriate special education for each student with a disability who attends a full-time virtual school program in the school division but resides in another school division in the Commonwealth and (ii) provide that the school division in which the student resides shall (a) be released from the obligation to provide free and appropriate special education for such student and (b) transfer to the school division in which the student attends a full-time virtual school program state and federal funds for the education of such students. The amendments bring the regulation into conformance with Chapter 433 of the 2014 Acts of Assembly.

Part III

Responsibilities of Local School Divisions and State-Operated Programs

8VAC20-81-30. Responsibility of local school divisions and state-operated programs.

A. The requirements set forth in this chapter are applicable to local school divisions and state-operated programs providing education and related services for children with

disabilities and are developed in accordance with state and federal laws and regulations.

B. Each local school division shall ensure that all children with disabilities aged two to 21, inclusive, residing in that school division have a right to a free appropriate public education. (§ 22.1-214 of the Code of Virginia; 34 CFR 300.2, 34 CFR 300.101, 34 CFR 300.124 and 34 CFR 300.209)

The children include:

1. Children with disabilities who are migrant;
2. Children with disabilities who are homeless, in accordance with the provisions of the McKinney-Vento Homeless Assistance Act (42 USC § 11431 et seq.);
3. Children with disabilities who are in need of special education and related services, even though the child has not failed or been retained in a course or grade, and is advancing from grade to grade;
4. Children with disabilities who are served in a public nonprofit charter school;
5. Children with disabilities who have been suspended or expelled from school;
6. Children with disabilities who are incarcerated for 10 or more days in a regional or local jail in its jurisdiction, with the exception of those additional provisions identified in 8VAC20-81-110 I;
7. Children with disabilities who are residents of the school division and who are on house arrest, as ordered by a court of competent jurisdiction;
8. Children with disabilities who are in foster care and residents of Virginia;
9. Children with disabilities who are placed for noneducational reasons; ~~and~~
10. Children with disabilities regardless of citizenship or immigration status; and
11. Children with disabilities who do not reside within its jurisdiction but reside in the Commonwealth and are enrolled in a full-time virtual school program provided by the school division, in accordance with regulations of the Board of Education. A school division that is required to provide a free appropriate public education, including special education, for a nonresident student who is enrolled in its full-time virtual school program pursuant to this section shall be entitled to any federal and state funds applicable to the education of such student. In the case of a student who is a resident of the Commonwealth but does not reside in the school division in which he is enrolled in a

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full-time virtual school program, the school division in which the student resides shall be released from the obligation to provide a free appropriate public education, including special education, for such student.

C. Every child with a disability is deemed to reside in a school division when (§ 22.1-3 of the Code of Virginia):

1. The child is living with a biological parent whose parental rights have not been terminated.
2. The child is living with an adoptive parent.
3. The child is living with an individual:
 - a. Other than the custodial parent but who is defined as a parent in § 22.1-1 of the Code of Virginia, not solely for school purposes; and
 - b. Pursuant to a special power of attorney executed under 10 USC § 1044b by the custodial parent while such custodial parent is deployed outside the United States as a member of the Virginia National Guard or as a member of the United States Armed Forces.
4. The parent(s) of the child is deceased and the child is living with a person in loco parentis who resides within the school division.
5. The parents of the child are unable to care for him and he is living, not solely for school purposes, with another person who resides in the school division and is either:
 - a. The court-appointed guardian, or has legal custody; or
 - b. Acting in loco parentis pursuant to placement of the child by a person or entity authorized to do so under § 63.2-900 of the Code of Virginia.
6. The child is living in the school division not solely for school purposes, as an emancipated minor pursuant to the provisions of the § 16.1-334 of the Code of Virginia.
7. The child is living in the school division not solely for school purposes, as a validly married minor who has not pursued emancipation under § 16.1-333 of the Code of Virginia but who asserts implied emancipation based on the minor's marriage record.
8. The child is in foster care and a resident of Virginia, but not a resident of the school division, under the following conditions: (§ 22.1-215 of the Code of Virginia)
 - a. The child has been placed in foster care or other custodial care within the geographical boundaries of the school division, placed by a Virginia agency, whether state or local, that is authorized by the Code of Virginia to place children; or
 - b. The child has been placed, not solely for school purposes, in a child-caring institution or group home licensed under the provisions of Chapter 17 (§ 63.2-1700 et seq.) of Title 63.2 of the Code of Virginia that is located within the geographical boundaries of the school division.

9. The child is in foster care and a resident of Virginia, and a resident of the school division, under the provisions of subdivision 8 of this subsection.

D. If a child with a disability is living with the parent in the residence of the local school division, the local school division is responsible for ensuring that the child receives a free appropriate public education even if the enrollment requirements for the child are not completed within a reasonable period of the parents' request to enroll the child. (34 CFR 300.101)

E. Requirements for children with disabilities who are placed for noneducational reasons:

1. The local school division that is part of the Comprehensive Services Act team that places the child in a private residential placement for noneducational reasons shall ensure that the child's IEP team develops an IEP appropriate for the child's needs while the child is in the residential placement.
2. If a child in foster care is placed in a local school division of nonresidence and the IEP team of the local school division of nonresidence where the child is placed determines that the child needs to be placed in a private day or residential special education facility for educational reasons, the responsibility for a free appropriate public education transfers to the local school division where the Virginia placing agency is located and is a participant in the community policy and management team of that local school division that has responsibility for the child under the Comprehensive Services Act (Chapter 52 (§ 2.2-5200 et seq.) of Title 2.2 of the Code of Virginia).
3. If placed in a nursing facility, a long stay hospital, or an intermediate care facility for people with intellectual disabilities under funding from the Virginia Department of Medical Assistance Services, the child is a resident of the division where the parent(s) resides.
4. If placed in a group home by a community services board, a court service unit, or a court of competent jurisdiction, the child is a resident of the division where the parent(s) resides.
5. If the child is aged 18 or older and placed in a nursing facility, a long stay hospital, or an intermediate care facility for people with intellectual disabilities under funding from the Virginia Department of Medical Assistance Services, and who has been declared legally incompetent or legally incapacitated by a court of competent jurisdiction and for whom the court has appointed a guardian to make decisions, the adult child is a resident of the division where the guardian resides.
6. If the child is aged 18 or older and placed in a group home by a community services board and has been declared legally incompetent or legally incapacitated by a court of competent jurisdiction and for whom the court has

appointed a guardian to make decisions, the adult child is a resident of the division where the guardian resides.

7. If the child is aged 18 or older, who has not been declared legally incompetent or legally incapacitated by a court of competent jurisdiction and for whom the court has not appointed a guardian to make decisions, the adult child's residence is the fixed home to which the adult child will return following the child's return from a facility and at which the adult child intends to stay. No adult child shall have more than one residence at a time.

8. If the child is aged 18 or older, who has been declared legally incompetent or legally incapacitated by a court of competent jurisdiction and for whom the court has appointed a guardian to make decisions, the adult child is a resident of the division where the guardian resides.

9. If placed in a sponsored residential home, licensed in accordance with 12VAC35-105, the child is a resident of the division where the parent(s) resides.

F. If there is a dispute between local school divisions regarding the parent's or legal guardian's residence, the local school division of the parent's or legal guardian's last known place of residence is responsible until such dispute is resolved or the parent's or legal guardian's residence is established in another local school division.

G. If there is dispute between the parent or legal guardian of a child with a disability and the local school division regarding residency, the local school division of where the child is last enrolled remains responsible for providing the child with a free appropriate public education until resolution of the dispute.

H. Each state-operated program shall ensure that the requirements in this chapter are applied to children with disabilities, aged two to 21, inclusive, in that institution. (§ 22.1-7 of the Code of Virginia)

1. For children with disabilities who are placed in a state-operated program as a long-term placement, the local educational agency of the parent's residence remains responsible for ensuring that the child receives a free appropriate public education.

2. The state-operated program shall ensure that the local educational agency of the parent's residence is advised of the child's admission, status, and meetings associated with the child receiving a free appropriate public education.

I. Children with disabilities who are not residents of Virginia but are living temporarily with adults who do not otherwise meet the definition of parent(s) residing within a school division may, in the discretion of the local school board's policies and procedures, be admitted to the public schools of the school division for special education and related services. Tuition charges associated with this admittance are subject to the provisions of § 22.1-5 of the Code of Virginia.

8VAC20-81-90. Termination of special education and related services.

A. Termination of a child's eligibility for special education and related services shall be determined by an eligibility group.

1. Termination of special education services occurs if the eligibility group determines that the child is no longer a child with a disability who needs special education and related service.

2. The local educational agency shall evaluate a child with a disability in accordance with 8VAC20-81-70 before determining that the child is no longer a child with a disability under this chapter.

3. Evaluation is not required before the termination of eligibility due to graduation with a standard or advanced studies high school diploma or reaching the age of 22. (34 CFR 300.305(e))

B. The IEP team shall terminate the child's eligibility for a related service without determining that the child is no longer a child with a disability who is eligible for special education and related services. The IEP team shall make this determination based on the current data in the child's education record, or by evaluating the child in accordance with 8VAC20-81-70.

C. Written parental consent shall be required prior to any partial or complete termination of services.

D. Prior to any partial or complete termination of special education and related services, the local educational agency shall comply with the prior written notice requirements of 8VAC20-81-170 C.

E. If the parent(s) revokes consent in writing for the child to continue to receive special education and related services, the local educational agency shall follow the procedures in 8VAC20-81-170 E 3 a to terminate the child's receipt of special education and related services. (34 CFR 300.9 and 34 CFR 300.300(b)(4))

F. Summary of academic achievement and functional performance. (34 CFR 300.305(e)(3))

1. For a child whose eligibility terminates due to graduation with a standard or advanced studies high school diploma or reaching the age of 22, the local educational agency shall provide the child with a summary of the student's academic achievement and functional performance, which shall include recommendations on how to assist the student in meeting the student's postsecondary goals.

2. If a child exits school without graduating with a standard or advanced studies high school diploma or reaching the age of 22, including if the child ~~receives a general educational development (GED) credential or~~ passes a high school equivalency examination approved by the Board of Education or receives an alternative diploma option, the local educational agency may provide the child with a

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summary of academic achievement and functional performance when the child exits school. However, if the child resumes receipt of educational services prior to exceeding the age of eligibility, the local educational agency shall provide the child with an updated summary when the child exits, or when the child's eligibility terminates due to graduation with a standard or advanced studies high school diploma or reaching the age of 22.

8VAC20-81-100. Free appropriate public education.

A. Age of eligibility.

1. A free appropriate public education shall be available to all children with disabilities who need special education and related services, aged two to 21, inclusive, who meet the definition of "age of eligibility" as outlined in 8VAC20-81-10 and who reside within the jurisdiction of each local educational agency. This includes children with disabilities who are in need of special education and related services even though they have not failed or been retained in a course or grade and are advancing from grade to grade, and students who have been suspended or expelled from school in accordance with the provisions of 8VAC20-81-160. The Virginia Department of Education has a goal of providing full educational opportunity to all children with disabilities aged birth through 21, inclusive, by 2015. (§ 22.1-213 of the Code of Virginia; 34 CFR 300.101 and 34 CFR 300.109)

- a. The services provided to the child under this chapter shall address all of the child's identified special education and related services needs.
- b. The services and placement needed by each child with a disability to receive a free appropriate public education shall be based on the child's unique needs and not on the child's disability.

2. Exceptions. The obligation to make a free appropriate public education to all children with disabilities does not apply to: (34 CFR 300.102(a))

- a. Children with disabilities who have graduated from high school with a standard or advanced studies high school diploma. This exception does not apply to age-eligible students who have graduated but have not been awarded a standard or advanced studies high school diploma, or to those students who have ~~been awarded a general educational development (GED) credential~~ passed a high school equivalency examination approved by the Board of Education.
- b. Children with disabilities, aged 18 to 21, inclusive, who, if in their last educational placement prior to their incarceration in an adult correctional facility, were not identified as being a child with a disability and did not have an IEP. This exception does not apply to children with disabilities, aged 18 to 21, inclusive, who had been identified as children with disabilities and had received services in accordance with their IEPs, but who left

school prior to their incarceration or did not have IEPs in their last educational setting but who had actually been identified as children with disabilities under this chapter.

c. Children with disabilities who are eligible under IDEA Part B, Subpart H, but who receive early intervention services under IDEA Part C.

B. A free appropriate public education shall be available to children with disabilities who reside within a school division but do not hold a valid U.S. citizenship or a student visa.

C. Program options. Each local school division shall take steps to ensure that its children with disabilities have available to them the variety of educational programs and services available to children without disabilities in the area served by the local educational agency, including art, music, industrial arts, consumer and homemaking education, and vocational education. (34 CFR 300.110)

D. Residential placement. If placement in a public or private residential program is necessary to provide special education and related services to a child with a disability, the program, including nonmedical care and room and board, shall be at no cost to the parents of the child. (34 CFR 300.104)

E. Assistive technology devices. (34 CFR 300.34(b) and 34 CFR 300.113)

1. Each local educational agency shall ensure that the following are functioning properly, including completing routine checks:
 - a. Hearing aids worn in school by children with hearing impairments, including deafness; and
 - b. The external components of surgically implanted devices.
2. A local educational agency is not responsible for the postsurgical maintenance, programming, or replacement of a medical device that has been surgically implanted (or of an external component of the surgically implanted medical device).

F. Availability of assistive technology. (34 CFR 300.105)

1. Each local educational agency shall ensure that assistive technology devices or assistive technology services, or both, as those terms are defined in 8VAC20-81-10, are made available to a child with a disability if required as part of the child's:
 - a. Special education;
 - b. Related services; or
 - c. Supplementary aids and services.
2. On a case-by-case basis, the use of school-purchased or leased assistive technology devices in a child's home or in other settings is required if the child's IEP team determines that the child needs access to those devices in order to receive a free appropriate public education.
3. Local educational agencies are not required to provide personal devices, including eyeglasses or hearing aids that

the child requires, regardless of whether the child is attending school, unless the IEP team determines that the device is necessary for the child to receive FAPE.

G. Transportation. (§§ 22.1-221 and ~~22.1-347~~ of the Code of Virginia; 34 CFR 300.107)

1. Each child with a disability, aged two to 21, inclusive, placed in an education program, including private special education day or residential placements, by the local school division shall be entitled to transportation to and from such program at no cost if such transportation is necessary to enable such child to benefit from educational programs and opportunities. Children with disabilities and children without disabilities shall share the same transportation unless a child's IEP requires specialized transportation.

2. If the IEP team determines that a child with a disability requires accommodations or modifications to participate in transportation, the accommodations or modifications shall be provided in the least restrictive environment. Transportation personnel may be on the IEP team or be consulted before any modifications or accommodations are written into the student's IEP to ensure that the modifications and accommodations do not violate any state or federal standard or any nationally recognized safety practices.

3. A local educational agency shall ensure that a child with a disability is provided a commute to and from an education program that is comparable in length to the commute provided to children without disabilities, unless the child's IEP team determines that a longer or shorter commute is necessary to ensure the child receives a free appropriate public education.

4. If a local educational agency enters an agreement with another local educational agency for the provision of special education or related services for a child with a disability, such child shall be transported to and from such program at no cost to the parent(s).

5. If a child with a disability is placed in the Virginia School for the Deaf and the Blind at Staunton, the Virginia school shall be responsible for the provision of transportation services. When such children are educated as day students, the local school division shall be responsible for the provision of transportation services to and from school.

H. Nonacademic and extracurricular services and activities. (34 CFR 300.107 and 34 CFR 300.117)

1. Each local educational agency shall take steps, including the provision of supplementary aids and services determined appropriate and necessary by the child's IEP team, to provide nonacademic and extracurricular services and activities in the manner necessary to afford children with disabilities an equal opportunity for participation in

those services and activities. (See also 8VAC20-81-130 A 2)

2. Nonacademic and extracurricular services and activities may include but not be limited to counseling services, athletics, transportation, health services, recreational activities, special interest groups or clubs sponsored by the local educational agency, referrals to agencies that provide assistance to individuals with disabilities, and employment of students, including both employment by the local educational agency and assistance in making outside employment available.

I. Physical education. (34 CFR 300.108)

1. General. Physical education services, specially designed if necessary, shall be made available to every child with a disability receiving a free appropriate public education, unless the local educational agency enrolls children without disabilities and does not provide physical education to children without disabilities in the same grade.

2. Regular physical education. Each child with a disability shall be afforded the opportunity to participate in the regular physical education program available to children without disabilities, unless:

- a. The child is enrolled full time in a separate facility; or
- b. The child needs specially designed physical education, as prescribed in the child's IEP that cannot be provided in the regular physical education program.

3. Special physical education. If specially designed physical education is prescribed in a child's IEP, the local educational agency responsible for the education of that child shall provide the services directly or make arrangements for those services to be provided through other public or private programs.

4. Education in separate facilities. The local educational agency responsible for the education of a child with a disability who is enrolled in a separate facility shall ensure that the child receives appropriate physical education services in compliance with this subsection.

J. Extended school year services. (34 CFR 300.106)

1. Each local educational agency shall ensure that extended school year services, including transportation to and from such services, are available as necessary to provide a free appropriate public education consistent with subdivision 2 of this subsection.

2. Extended school year services shall be provided only if a child's IEP team determines on an individual basis in accordance with this chapter that the services are necessary for the provision of a free appropriate public education to the child, because the benefits a child with a disability gains during the regular school year will be significantly jeopardized if extended school year services are not provided.

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3. In implementing the requirements of this section, a local educational agency may not:

- a. Limit extended school year services to particular categories of disability;
- b. Unilaterally limit the type, amount, or duration of those services; or
- c. Limit the provision of extended school year services to only the summer.

K. Children with disabilities in public charter schools. (34 CFR 300.209)

1. Children with disabilities who attend charter schools shall be served by the local school division in the same manner as children with disabilities in its other schools, including the provision of supplementary and related services on site at the charter school to the same extent to which the local educational agency provides such services on the site to its other public schools.

2. The local school division shall ensure that all requirements of this chapter are met.

L. Length of school day. School-aged students with disabilities shall be provided a school day comparable in length to the day provided to school-aged students without disabilities unless their IEP specifies otherwise. For preschool-aged children with disabilities, the IEP team determines the length of the school day.

M. Methods and payments. (34 CFR 300.103)

1. The Virginia Department of Education may use whatever state, local, federal, and private sources of support that are available to meet the requirements of this part.

2. Nothing in this part relieves an insurer or similar third party from an otherwise valid obligation to provide or to pay for services provided to a child with a disability.

3. The Virginia Department of Education will ensure that there is no delay in implementing a child's IEP, including any case in which the payment source for providing or paying for special education and related services to the child is being determined.

N. Disability harassment. Each local educational agency shall have in effect policies that prohibit harassment to children with disabilities. (28 CFR 35.149 and 34 CFR 104.4)

VA.R. Doc. No. R15-4263; Filed June 9, 2015, 10:53 a.m.

Final Regulation

REGISTRAR'S NOTICE: The State Board of Education is claiming an exclusion from Article 2 of the Administrative Process Act in accordance with § 2.2-4006 A 4 a of the Code of Virginia, which excludes regulations that are necessary to conform to changes in Virginia statutory law where no agency discretion is involved. The State Board of Education will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

Title of Regulation: **8VAC20-150. Management of the Student's Scholastic Record in the Public Schools of Virginia (amending 8VAC20-150-20).**

Statutory Authority: §§ 22.1-16 and 22.1-289 of the Code of Virginia.

Effective Date: July 29, 2015.

Agency Contact: John Eisenberg, Assistant Superintendent for Special Education and Student Services, Department of Education, P.O. Box 2120, Richmond, VA 23218, telephone (804) 225-2711, or email john.eisenberg@doe.virginia.gov.

Summary:

The amendment adds § 22.1-287.01 of the Code of Virginia, enacted by Chapter 322 of the 2014 Acts of Assembly, to the list of state and federal laws and regulations that local education agencies must abide by in managing the scholastic records of students. Section 22.1-287.01 prohibits a member or employee of a local school board or the Department of Education from transmitting personally identifiable information from a student's record to a federal government agency or an authorized representative of such agency, except as required by federal law or regulation.

8VAC20-150-20. Management of scholastic record.

A. Local education agencies shall manage the scholastic records of all students in compliance with applicable law, including the Family Educational Rights and Privacy Act of 1974, 20 USC § 1232g, 34 CFR 99; the Individuals with Disabilities Education Act, 20 USC §§ 1400-1485, 34 CFR 300; and §§ ~~2.1-377~~ 2.2-3800 through ~~2.1-386~~ 2.2-3809, 16.1-260, 16.1-305.1, 16.1-305.2, 22.1-3.1, 22.1-270, 22.1-271.2, 22.1-287, 22.1-287.01, 22.1-287.1, 22.1-288, 22.1-288.2, 22.1-289, 32.1-36.1 and 42.1-76 through ~~42.1-94~~ 42.1-90.1 of the Code of Virginia.

B. Every notice of adjudication or conviction received by a local superintendent, and information contained in the notice, which is not a disciplinary record, shall be maintained by him and by any others to whom he disseminates it, separately from all other records concerning the student. However, if the school administrators or the school board takes disciplinary action against the student based upon an incident which formed the basis for the adjudication or conviction, the notice shall become a part of the student's disciplinary record. As used herein, "disciplinary record" means a record which is directly related to a student and any disciplinary action taken against that student for violation of school rules or policies occurring on school property or at school-sponsored events.

VA.R. Doc. No. R15-4262; Filed June 9, 2015, 10:54 a.m.



TITLE 9. ENVIRONMENT

STATE AIR POLLUTION CONTROL BOARD

Fast-Track Regulation

Titles of Regulations: 9VAC5-80. Permits for Stationary Sources (Rev. D14) (amending 9VAC5-80-1615, 9VAC5-80-1865, 9VAC5-80-2010, 9VAC5-80-2144).

9VAC5-85. Permits for Stationary Sources of Pollutants Subject to Regulation (Rev. D14) (amending 9VAC5-85-50, 9VAC5-85-55).

Statutory Authority: § 10.1-1308 of the Code of Virginia; Clean Air Act (§§ 110, 112, 165, 173, 182, and Title V); 40 CFR Parts 51, 61, 63, 70, and 72.

Public Hearing Information: No public hearings are scheduled.

Public Comment Deadline: July 29, 2015.

Effective Date: August 13, 2015.

Agency Contact: Karen G. Sabasteanski, Department of Environmental Quality, 629 East Main Street, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4426, FAX (804) 698-4510, TTY (804) 698-4021, or email karen.sabasteanski@deq.virginia.gov.

Basis: Section 10.1-1308 of the Virginia Air Pollution Control Law authorizes the State Air Pollution Control Board to promulgate regulations abating, controlling, and prohibiting air pollution in order to protect public health and welfare.

General. Sections 109(a) and 109(b) of the 1990 federal Clean Air Act (Act) require the U.S. Environmental Protection Agency (EPA) to prescribe primary and secondary air quality standards to protect public health and welfare, respectively, for each air pollutant for which air quality criteria were issued before the enactment of the 1970 Clean Air Act. These standards are known as the National Ambient Air Quality Standards (NAAQS). Section 109(c) requires EPA to prescribe such standards simultaneously with the issuance of new air quality criteria for any additional air pollutant. The primary and secondary air quality criteria are authorized for promulgation under § 108 of the Act.

Section 110(a) of the Act mandates that each state adopt and submit to EPA a state implementation plan (SIP) that provides for the implementation, maintenance, and enforcement of each NAAQS within each air quality control region in the state. One of the programs that the SIP must include is a program for the regulation of the modification and construction of any stationary source within areas covered by the plan to assure the attainment of the NAAQS, including a permit program as required by Parts C and D of Title I of the Act.

40 CFR Part 50 specifies the NAAQS: sulfur dioxide, particulate matter, carbon monoxide, ozone (and its precursors), nitrogen dioxide, and lead.

40 CFR Part 51 sets out requirements for the preparation, adoption, and submittal of SIPs. These requirements mandate that a SIP include certain provisions, as summarized below.

Subpart G (Control Strategy) specifies the description of emissions reductions estimates sufficient to attain and maintain the standards, the description of control measures and schedules for implementation, time periods for demonstrations of the control strategy's adequacy, an emissions inventory, an air quality data summary, data availability, special requirements for lead emissions, stack height provisions, and intermittent control systems.

Subpart I (Review of New Sources and Modifications) specifies legally enforceable procedures, public availability of information on sources, identification of responsible agency, and administrative procedures.

Section 51.160 of Subpart I specifies that the SIP must stipulate legally enforceable procedures that enable the permitting agency to determine whether the construction or modification of a facility will result in either a violation of any part of a control strategy or interference with attainment or maintenance of a national standard and, if such violation or interference would occur, the means by which the construction or modification can be prevented. The procedures must identify types of facilities that will be subject to review and discuss the basis for determining which facilities will be subject to review. The procedures must provide that facility owners must submit information on the nature and amounts of emissions and on the location, construction, and operation of the facility. The procedures must ensure that owners comply with applicable control strategies after permit approval and must discuss air quality data and modeling requirements on which applications must be based.

Section 51.161 of Subpart I specifies that the permitting agency must provide opportunity for public comment on information submitted by owners and on the agency's analysis of the effect of construction or modification on ambient air quality, including the agency's proposed approval or disapproval. Section 51.161 also specifies the minimum requirements for public notice and comment on this information.

Section 51.162 of Subpart I specifies that the responsible agency must be identified in the SIP. Section 51.163 of Subpart I specifies that the SIP must include administrative procedures to be followed in determining whether the construction or modification of a facility, building, structure or installation will violate applicable control strategies or interfere with the attainment or maintenance of a national standard. Section 51.164 of Subpart I governs stack height procedures, and Subpart L (Legal Authority) specifies identification of legal authority to implement plans and assignment of legal authority to local agencies.

Section 51.230 of Subpart L specifies that each SIP must show that the state has the legal authority to carry out the

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plan, including the authority to adopt measures necessary for the attainment and maintenance of the NAAQS; to enforce applicable laws, regulations, and standards, and seek injunctive relief; to obtain information necessary to determine whether air pollution sources are in compliance with applicable laws, regulations, and standards, including authority to require recordkeeping and to make inspections and conduct tests of air pollution sources; and to prevent construction, modification, or operation of a facility which directly or indirectly results in emissions of any air pollutant that will prevent the attainment or maintenance of a national standard.

Prevention of Significant Deterioration (PSD)

Part C of the Clean Air Act is entitled, "Prevention of Significant Deterioration of Air Quality." As described in § 160 of the Act, the purpose of Part C is to protect existing clean air resources. Part C requires that the SIP include a PSD program. Section 161 of Part C says:

In accordance with the policy of § 101(b)(1), each applicable implementation plan shall contain emission limitations and such other measures as may be necessary, as determined under regulations promulgated under this part, to prevent significant deterioration of air quality in each region (or portion thereof) designated pursuant to § 107 as attainment or unclassifiable.

This means that the air in areas that meet national clean air standards is not allowed to become less clean, that is, to deteriorate.

Sections 162 through 169B go on to provide the details of how each state's PSD program is to be designed and operated. Section 165, "Preconstruction Requirements," is the section of the Act that deals with new source review (NSR) permit programs. This section requires that sources obtain permits demonstrating that they will not contribute to air pollution in excess of that allowed by the Act. Section 165 also specifies what steps are needed to coordinate this permitting process with the federal land managers, who are responsible for maintaining air quality in the cleanest areas of the country: the national parks. Section 165 specifies that new sources locating in attainment areas must meet best available control technology (BACT), which is defined in § 169. Section 166 requires EPA to regulate certain types of pollutants in PSD areas.

40 CFR 51.166 provides details of what state PSD programs must include. These details include how to revise the program, how and when to assess the program, public participation requirements, and how to amend the program. 40 CFR 51.166(a)(1) states, "Each applicable State Implementation plan shall contain emission limitations and such other measures as may be necessary to prevent significant deterioration of air quality." 40 CFR 51.166(a)(7) specifies the source applicability for the review of major sources and modifications and defines certain principles to be applied in the administration of the program. The remainder

of 40 CFR 51.166 provides details on what the SIPs must contain.

Significant PSD concepts such as "baseline actual emissions," "major stationary source," "major modification," "net emissions increase," "potential to emit," "baseline concentration," and "significant" are defined in 40 CFR 51.166(b). In 40 CFR 51.166(c), ambient air increments are found, while ambient air ceilings are specified in 40 CFR 51.166(d). Area classifications are restricted in 40 CFR 51.166(e); exclusions from increment consumption are listed in 40 CFR 51.166(f). Redesignation of Class I, II, or III areas is discussed in § 51.166(g) and stack height requirements are given in 40 CFR 51.166(h). Exemptions are found in 40 CFR 51.166(i). 40 CFR 51.166(j) covers control technology review, specifically in 40 CFR 51.166(j)(2) and (3), which require that new sources or major modifications must meet BACT as defined in 40 CFR 51.166(b)(12). Requirements for source impact analysis are given in 40 CFR 51.166(k). Air quality models are described in 40 CFR 51.166(l). Preapplication analysis, post-construction monitoring, and operation of monitoring stations are found in 40 CFR 51.166(m), air quality analysis. Sources must provide information as described in 40 CFR 51.166(n), as well as additional impact analyses as described in 40 CFR 51.166(o). Sources that affect federal Class I areas must meet the requirements of 40 CFR 51.166(p), which also describes the responsibilities of the federal land manager. Public participation requirements are found in 40 CFR 51.166(q). 40 CFR 51.166(r) includes additional information on source obligation, and 40 CFR 51.166(s) allows for the use of innovative control technologies. Finally, provisions for plantwide applicability limits (PALs) are found in 40 CFR 51.166(w) and 40 CFR 52.21(aa).

Nonattainment. Part D of the Clean Air Act, "Plan Requirements for Nonattainment Areas," describes how nonattainment areas are established, classified, and required to meet attainment. Subpart 1, Nonattainment Areas in General, consists of §§ 171 through 179, and provides the overall framework of what nonattainment plans are to contain, permit requirements, planning procedures, motor vehicle emission standards, and sanctions and consequences of failure to attain. Subpart 2, Additional Provisions for Ozone Nonattainment Areas, consists of §§ 181 through 185, and provides more detail on what is required of areas designated as nonattainment for ozone.

Section 182(a)(2)(C) sets out the general requirements for NSR programs in all nonattainment areas and mandates a new and modified major stationary source permit program that meets the requirements of §§ 172 and 173 of the Act. Section 172 contains the basic requirement for a permit program, while § 173 contains the specifics summarized below.

Section 173(a) provides that a permit may be issued if the following criteria are met:

1. Offsets have been obtained for the new or expanding sources from existing sources so that total allowable emissions (i) from existing sources in the region, (ii) from new or modified sources which are not major emitting facilities, and (iii) from the proposed new source will be sufficiently less than total emissions from existing sources prior to the application for the permit.
2. The proposed source complies with the lowest achievable emission rate (LAER).
3. The owner of the proposed source has demonstrated that all major stationary sources owned or operated by the owner in the state are subject to emission limitations and are in or on a schedule for compliance with all applicable emission limitations or standards.
4. The SIP is being adequately implemented for the nonattainment area in which the proposed source is to be located.
5. An analysis of alternative sites, sizes, production processes, and environmental control techniques for the proposed source demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

Section 173(c) provides that the owner of the proposed new or modified source may obtain offsets only from the nonattainment area in which the proposed source is to be located. Offsets may be obtained from other nonattainment areas whose emissions affect the area where the proposed source is to be located, provided the other nonattainment area has an equal or higher classification and the offsets are based on actual emissions.

A major stationary source is defined for general application in § 302 of the Act as "any facility or source of air pollutants which directly emits, or has the potential to emit, 100 tons per year or more of any air pollutant." For nonattainment areas defined as serious or worse, § 182(c) specifically defines a major stationary source as a facility emitting 50 tons per year or more; and for nonattainment areas defined as severe or worse, § 182(d) specifically defines a major stationary source as a facility emitting 25 tons per year or more. Section 182(f) provides that requirements which apply to major stationary sources of volatile organic compounds (VOCs) under the Act shall also apply to major stationary sources of nitrogen oxides (NO_x).

Section 182(a)(4) sets out the requirements for marginal areas with respect to offset ratios, providing for a minimum ratio of total emissions reduction of VOCs to total increased emissions of VOCs of 1.1 to 1. Likewise § 182(b)(5) sets out the offset requirements for moderate nonattainment areas, specifying the ratio to be at least 1.15 to 1. Accordingly, § 182(c)(10) sets out the offset requirements for serious nonattainment areas, specifying the ratio to be at least 1.2 to 1. Finally, § 182(d)(2) sets out the offset requirements for

severe nonattainment areas, specifying the ratio to be at least 1.3 to 1.

Sections 182(c)(6) through 182(c)(8) contain some additional specifics for serious or worse nonattainment areas concerning the establishment of a de minimis level for expanding existing sources and the allowance of internal offsets as an alternative to the permit requirements. NSR programs must include provisions to require permits for modifications of all existing sources unless the increase in net emissions from the source does not exceed 25 tons when aggregated with all other net increases in emissions from the source over any period of five consecutive calendar years, including the calendar year in which the increase occurs. The program must also include provisions concerning internal offsets as alternatives to the permit requirements. For sources emitting less than 100 tons per year and applying for a permit to expand, a permit will be required unless the owner elects to offset the increase by a greater reduction in emissions of the same pollutant from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1. If the owner does not choose the option of an internal offset, a permit will be required but the control technology level required will be BACT instead of lowest achievable emission rate (LAER). For sources emitting 100 tons or more per year and applying for a permit to expand, control technology requirements which constitute LAER will be required unless the owner elects to offset the increase by a greater reduction in emissions of the same pollutant from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1.

40 CFR 51.165 enumerates permit requirements for nonattainment areas. This section describes what permitting requirements are to be contained in the SIP. Specific definitions of key terms such as "potential to emit," "major stationary source," "major modification," "allowable emissions," and "lowest achievable emission rate," are found in 40 CFR 51.165(a)(1). In 40 CFR 51.166(a)(2), the SIP must include a preconstruction review program to satisfy the requirements of 40 CFR 172(b)(6) and § 173 of the Act, and must apply to any new source or modification locating in a nonattainment area; 40 CFR 51.166(a)(2) also defines certain principles to be applied in the administration of the program. Section 51.165(a)(3) describes how emissions and emission reductions are to be measured and included in the SIP; 40 CFR 51.165(a)(4) lists a number of exemptions. 40 CFR 51.165(a)(5) stipulates that sources must meet the SIP as well as other state and federal requirements. In accordance with 40 CFR 51.165(a)(6), owners of projects at existing emissions units at a major stationary source in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase must monitor emissions and record and report certain data; additionally, 40 CFR 51.165(a)(7) requires that such information be made available for review.

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40 CFR 51.165(b) requires that sources meet the requirements of § 110(a)(2)(d)(i). This section also provides significance levels of pollutants which may not be exceeded by any source or modification. Finally, 40 CFR 51.165(f) provides requirements for PALs. Provisions for PALs for greenhouse gases are found in 40 CFR 52.21(aa).

NSR Reform. On December 31, 2002 (67 FR 80185), EPA promulgated revisions, commonly known as "new source review reform," to the federal NSR permitting program for major stationary sources. Changes to the NSR program incorporated five main elements: changes to the method for determining baseline actual emissions, changes to the method for determining emissions increases due to an operational change, provisions to exclude pollution control projects from NSR; provisions for determining applicability of NSR requirements for units designated as clean units, and provisions to allow for compliance with PALs. (Note that on June 24, 2005, the D.C. Circuit Court of Appeals vacated the clean unit and pollution control project provisions, which were therefore never implemented.)

In areas where a state administers the NSR program under an approved SIP, the state was required to adopt and submit revisions to the SIP to reflect the federal rule revisions no later than January 2, 2006. The EPA regulations on which the state regulations are based allow states some discretion in how the program is implemented. As long as the base elements of the program are included, states are allowed to tailor the federal regulations to meet state needs. EPA has stated that specific enforcement of the regulations is to be delineated by the states. Generally, as long as the state regulations do not impede a source's ability to use the basic elements of the NSR program, EPA considers the state regulations to be equally as protective as the federal regulations.

State Requirements. Section 10.1-1307 A of the Code of Virginia provides that the board may, among other activities, develop a comprehensive program for the study, abatement, and control of all sources of air pollution in the Commonwealth.

Section 10.1-1308 of the Code of Virginia provides that the board shall have the power to promulgate regulations abating, controlling, and prohibiting air pollution throughout or in any part of the Commonwealth in accordance with the provisions of the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia). It further provides that the regulations shall not promote or encourage any substantial degradation of present air quality in any air basin or region which has an air quality superior to that stipulated in the regulations.

At the time the Virginia NSR reform regulation amendments were being developed (2004-2005), a number of issues were identified that necessitated some deviations from the federal program in order to meet certain Virginia-specific issues, including considerable uncertainty as to how the NSR reforms would be implemented as a practical matter, and the

potential for increases in air pollution. The final regulation amendments were adopted by the board on June 21, 2006, submitted to EPA on October 10, 2006, and approved into the SIP on October 22, 2008 (73 FR 62897).

Additionally, a separate chapter (9VAC5-85, Permits for Stationary Sources of Pollutants Subject to Regulation) was established in order to regulate PSD NSR permits specifically for sources of greenhouse gases. This chapter contains PAL requirements that are based on the specific PAL requirements in 40 CFR 52.21(aa) and the general requirements in 9VAC5-80.

Purpose: General. The purpose of the regulation is to protect public health, safety, and welfare by enabling the department to determine whether a new or modified source will affect ambient air quality standards and PSD ambient air increments. The proposed amendments are not expected to affect the purpose of the regulation and some reduction in emissions may result from amendment to plantwide applicability limits.

Among the primary goals of the federal Clean Air Act are the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) and the prevention of significant deterioration (PSD) of air quality in areas cleaner than the NAAQS. The Act gives EPA the authority to establish the NAAQS, which are designed to protect the health of the general public with an adequate margin of safety. The NAAQS establish the maximum limits of pollutants that are permitted in the outside ambient air. The Act requires that each state submit a state implementation plan (SIP), including any regulations necessary to enforce the plan, showing how the air pollution concentrations will be reduced to levels at or below these standards (attainment). Once the pollution levels are within the standards, the plan must also demonstrate how the state will maintain the air pollution concentrations at reduced levels (maintenance).

The heart of the SIP is the control strategy. The control strategy describes the measures to be used by the state to attain and maintain the air quality standards. There are three basic types of control measures: stationary source control measures, mobile source control measures, and transportation source control measures. Stationary source control measures are directed at emissions primarily from commercial and industrial facilities and operations. Mobile source control measures are directed at tailpipe and other emissions from motor vehicles, and transportation source control measures affect motor vehicle location and use.

A key control measure for managing the growth of new emissions from stationary sources is to require preconstruction review of new major facilities or major modifications to existing ones. This review is accomplished through a permit program for new and modified stationary sources. The program requires that owners obtain a permit from the Department of Environmental Quality (DEQ) prior to the construction of a new industrial or commercial facility

or the modification (physical change or change in the method of operation) of an existing one. Program requirements differ according to the facility's potential to emit a certain amount of a specific pollutant and the air quality status of the area where the facility is or will be located. Requirements for facilities considered major due to their potential to emit a specified pollutant are more stringent than for less polluting facilities. Requirements for major facilities in nonattainment areas are considerably more stringent than for those in areas that meet the standard (i.e., PSD areas).

Prevention of Significant Deterioration (PSD). The PSD program is designed to protect air quality in areas where the air is cleaner than required by the NAAQS. Areas that are thus designated as "attainment" are further classified to define the level of allowable degradation: Class I is the most stringent classification, allowing for little additional pollution, while Class III allows the most. All of Virginia is classified at the moderate level, Class II, with the exception of two Class I federal lands.

Prior to construction or expansion of an industrial facility, a permit must be issued that ensures that the facility will not emit pollutants in sufficient quantity to make a significant contribution to the deterioration of air quality or to violate the NAAQS. Additionally, the owner must provide an analysis of the impairment to air quality related values (including visibility) that would occur as a result of the source or modification. The permit application and DEQ review and analysis must be subject to a public hearing prior to issuing the permit. The facility must use the best available control technology to control emissions. If the facility is to be located near a Class I area, the federal land manager is involved in the review process, and additional data is required.

Nonattainment. When concentrations of ambient air pollution exceed the federal standard, the area is considered to be out of compliance and is designated "nonattainment." A number of counties and cities within the Commonwealth are designated nonattainment for the eight-hour ozone standard and the fine particle (PM_{2.5}) standard.

The Act has a process for identifying and classifying each nonattainment area according to the severity of its air pollution problem for ozone. There are five nonattainment area classifications: marginal, moderate, serious, severe, and extreme. Marginal areas are subject to the least stringent requirements and each subsequent classification is subject to successively more stringent control measures. Areas in a higher classification of nonattainment must meet the mandates of the lower classifications plus the more stringent requirements of its own class. If a particular area fails to attain the federal standard by the legislatively mandated attainment date, EPA is required to reassign it to the next higher classification level (denoting a worse air quality problem), thus subjecting the area to more stringent air pollution control requirements.

Permits issued in nonattainment areas require the facility owner to apply control technology that meets the lowest achievable emission rate and to obtain emission reductions from existing sources. The emission reductions must offset the increases from the proposed facility by the ratio specified in the Act for that particular nonattainment classification.

Virginia-specific issues. In the regulation amendments adopted by the board on June 21, 2006, a number of changes were made to the baseline federal requirements in order to better suit the Virginia NSR program and to alleviate concerns at the time about implementation and impacts. Since then, DEQ has gained experience in implementing the program and has monitored how the program is being implemented in other states.

On October 22, 2013, the board received a petition from the Virginia Manufacturers Association (VMA) to initiate a rulemaking concerning major NSR. The petitioner requested that the board amend Article 8, Permits for Major Stationary Sources and Major Modifications Locating in Prevention of Significant Deterioration Areas (9VAC5-80-1605 et seq.) and Article 9, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas or the Ozone Transport Region (9VAC5-80-2000 et seq.) of Part II of 9VAC5-80 (Permits for Stationary Sources) as follows:

1. Amend the definition of "baseline actual emissions" in 9VAC5-80-1615 C and 9VAC5-80-2010 C and make any other regulatory changes necessary to make the Virginia regulation conform with the federal definition. This would allow VMA members and other facility owners in Virginia to use a 10-year lookback period, thus making the Virginia regulations no more stringent than federally required.
2. Amend subdivision b 4 of the definition of "baseline actual emissions" in 9VAC5-80-1615 C and 9VAC5-80-2010 C, amend 9VAC5-80-1865 E and 9VAC5-80-2144 E, and make any other regulatory changes necessary to make the Virginia regulation conform with the federal definition. This would allow VMA members and other facility owners in Virginia to use different lookback periods for different regulated NSR pollutants, thus making the Virginia regulations no more stringent than federally required.
3. Amend 9VAC5-80-1615 C, 9VAC5-80-1865 C 1 f, 9VAC5-80-2010 C, and 9VAC5-80-2144 C 1 f, and make any other regulatory changes necessary to make the Virginia regulation conform with the federal definition. This would allow VMA members and other facility owners in Virginia to obtain PALs for 10 years, rather than only five years, thus making the Virginia regulations no more stringent than federally required.
4. Amend the definition of "emissions unit" and add a definition of "replacement unit" in 9VAC5-80-1615 C and 9VAC5-80-2010 C, and make any other regulatory changes necessary to make the Virginia regulation conform with the federal definition. This would allow VMA members and other facility owners in Virginia to use the

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baseline actual emissions of the unit being replaced and the projected actual emissions of the replacement unit, thus making the Virginia regulations no more stringent than federally required.

As required by the Administrative Process Act, notice of the opportunity to submit written comments on the petition was given to the public on December 30, 2013, in the Virginia Register and the public comment period closed on January 30, 2014. Eight comments were received, all in favor of the petition. After being presented with the results of the comment period, the board elected to grant the petition on April 4, 2014, and directed the department to amend the regulations accordingly.

Because the PAL requirements for PSD sources of greenhouse gases are based on those in Article 8 with additional requirements derived from 40 CFR 52.21, these provisions must also be modified.

Finally, a number of administrative amendments intended to provide clarity were identified.

Rationale for Using Fast-Track Process: The petition underwent a public comment period in accordance with the Administrative Process Act; eight comments were received, all positive. In addition, the department determined that aligning the Virginia regulations with the EPA regulations would not have an adverse impact on the permitting program and would likely be generally beneficial. EPA was also consulted and did not express any negative reaction. Given the lack of negative public comment, and the positive result of the department's analysis, it is not anticipated that the proposal will be controversial.

Substance: The definition of "baseline actual emissions" in 9VAC5-80-1615 C and 9VAC5-80-2010 C will be amended to conform the Virginia regulation to the federal requirements of 40 CFR 51.166(b)(47) and 40 CFR 51.165(a)(1)(xxxv). This will extend the lookback period from five years to 10 years.

The definition of "baseline actual emissions" in 9VAC5-80-1615 C and 9VAC5-80-2010 C, and 9VAC5-80-1865 E and 9VAC5-80-2144 E, will be amended to conform the Virginia regulation to the federal requirements of 40 CFR 51.166(b)(47) and 40 CFR 51.166(w), and 40 CFR 51.165(a)(1)(xxxv) and 40 CFR 51.165(f)(6). This will enable different lookback periods for different regulated NSR pollutants.

9VAC5-80-1615 C, 9VAC5-80-1865 C 1 f, 9VAC5-80-2010 C, and 9VAC5-80-2144 C 1 will be amended to conform the Virginia regulation to the federal requirements of 40 CFR 51.166(w) and 40 CFR 51.165(f). This will increase the PAL effective period from five years to 10 years.

The definitions of "emissions unit" will be amended to conform the Virginia regulation to the federal requirements of 40 CFR 51.166(b)(7) and 40 CFR 51.165(a)(1)(vii), and a definition of "replacement unit" will be added in 9VAC5-80-

1615 C and 9VAC5-80-2010 C in accordance with 40 CFR 51.166(b)(32) and 40 CFR 51.165(a)(1)(xxi). This will enable use of the baseline actual emissions of the unit being replaced and the projected actual emissions of the replacement unit.

The definitions of "baseline actual emissions for a GHG PAL" and "PAL effective period" in 9VAC5-85-50 C will be amended to conform the Virginia regulation to the federal requirements of 40 CFR 52.21(aa)(2)(xiii) and 40 CFR 52.21(aa)(2)(vii). This will extend the lookback period from five years to 10 years, and remove a requirement that prohibits different lookback periods for different regulated NSR pollutants.

9VAC5-85-55 will be amended to conform the Virginia regulation to the federal requirements of 40 CFR 52.21(aa). This will increase the PAL effective period from five years to 10 years.

The definition of "emissions unit" will be amended to conform the Virginia regulation to the federal requirements of 40 CFR 51.166(b)(7) and 40 CFR 51.165(a)(1)(vii), and a definition of "replacement unit" will be added in 9VAC5-85-50 C in accordance with 40 CFR 51.166(b)(32) and 40 CFR 51.165(a)(1)(xxi). This will enable use of the baseline actual emissions of the unit being replaced and the projected actual emissions of the replacement unit. Although there are no specific replacement unit provisions in the federal greenhouse gas (GHG) PAL rule, the definitions are baseline PSD concepts, and it is appropriate to include them in the state GHG PAL rule.

Issues: Public: The public will likely benefit from the amendments, as they will help the major NSR permitting program to operate more effectively and encourage the implementation of projects that are more protective of air quality. There are no disadvantages to the public.

Department: The department will likely benefit from the amendments, as they will help the major NSR permitting program to operate more effectively and encourage the implementation of projects that are more protective of air quality. There are no disadvantages to the department.

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulations. The Air Pollution Board (Board) proposes to 1) amend the definition of "baseline actual emissions" to allow the use of a 10-year lookback period rather than current 5-year period, 2) amend the definition of "baseline actual emissions" to allow the use of different lookback periods for different regulated NSR pollutants, 3) amend plantwide applicability limits (PAL) requirements such that a PAL effective period is for 10 years rather than current 5 years, and 4) amend the definition of "emissions unit" and add a definition of "replacement unit" to enable the use of the baseline actual emissions of the unit being replaced and the projected actual emissions of the replacement unit.

Result of Analysis. There is insufficient data to accurately compare the magnitude of the benefits versus the costs. Detailed analysis of the benefits and costs can be found in the next section.

Estimated Economic Impact. The proposed changes will make certain elements of the major new source review (NSR) program consistent with the U.S. Environmental Protection Agency (EPA) regulations. More specifically, the Board proposes to 1) amend the definition of "baseline actual emissions" to allow the use of a 10-year lookback period rather than current 5-year period, 2) amend the definition of "baseline actual emissions" to allow the use of different lookback periods for different regulated NSR pollutants, 3) amend plantwide applicability limits (PAL) requirements such that a PAL effective period is for 10 years rather than current 5 years, and 4) amend the definition of "emissions unit" and add a definition of "replacement unit" to enable the use of the baseline actual emissions of the unit being replaced and the projected actual emissions of the replacement unit. The Virginia Manufacturers Association has petitioned the Board for these changes.

The proposed changes will provide more flexibility to the permit applicants. For example, being able to use a 10-year lookback period will allow the regulants to pick more favorable historical emissions data to establish their baseline. Similarly, allowing different lookback periods for different pollutants will allow the regulants to pick more favorable historical emissions data to establish their baseline. Extending the PAL's effective period from 5 to 10 years will make them more attractive and provide more flexibility to the regulants.

The additional flexibility may reduce the number of permit applications and revisions. A reduction in the number of applications would provide administrative cost savings to the affected entities and the Department of Environmental Quality (DEQ), reduce business uncertainty, and allow sources to respond more quickly to changing market conditions. In addition, the proposed changes will conform to federal regulations which may produce additional benefits by reducing potential for confusion and/or by improving consistency.

There is uncertainty regarding the potential impact on emissions. On one hand, more favorable lookback periods may lead to an increase in baseline emissions and consequently an increase in permit limits. On the other hand, more favorable PAL periods may encourage reduction in emissions.

Businesses and Entities Affected. Approximately 300 sources may be eligible to utilize the proposed version of NSR. Of these sources, some or all of them may avail themselves of some or all of the elements of the regulations. However, the specific number, type, and size of sources to be affected by the regulations is impossible to predict, as such a prediction must approximate the need and ability of sources to make specific plant-by-plant modifications, which depend on local,

national, and global economies as well as by a source's individual, plant-specific needs. Similarly, PAL program elements are optional. The ability to utilize certain elements of the regulations depend on a source's ability to calculate and provide certain types of data over particular periods of time, to be capable of performing certain types of testing and monitoring, and many other requirements that a source may or may not be able to undertake. In short, there is no reliable estimate regarding the number of affected entities.

Localities Particularly Affected. The proposed regulation applies throughout the Commonwealth.

Projected Impact on Employment. A reduction in the number of permit applications would reduce demand for administrative labor both by the affected sources and by DEQ while added flexibility would increase labor demand if it leads to increased business activity. It is not known if any of the potential effects will be significant.

Effects on the Use and Value of Private Property. It is not known if any of the potential effects will be significant. Consequently, the potential positive impact on the asset value of affected entities may or may not be significant.

Small Businesses: Costs and Other Effects. Some of the affected sources may be small businesses. The costs and other effects on them are the same as discussed above.

Small Businesses: Alternative Method that Minimizes Adverse Impact. The proposed changes are not anticipated to have an adverse impact on small businesses.

Real Estate Development Costs. No significant impact on real estate development costs is expected.

Legal Mandate. General: The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Code of Virginia and Executive Order Number 17 (2014). Section 2.2-4007.04 requires that such economic impact analyses determine the public benefits and costs of the proposed amendments. Further the report should include but not be limited to:

- the projected number of businesses or other entities to whom the proposed regulation would apply,
- the identity of any localities and types of businesses or other entities particularly affected,
- the projected number of persons and employment positions to be affected,
- the projected costs to affected businesses or entities to implement or comply with the regulation, and
- the impact on the use and value of private property.

Small Businesses: If the proposed regulation will have an adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include:

- an identification and estimate of the number of small businesses subject to the proposed regulation,

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- the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the proposed regulation, including the type of professional skills necessary for preparing required reports and other documents,
- a statement of the probable effect of the proposed regulation on affected small businesses, and
- a description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation.

Additionally, pursuant to § 2.2-4007.1, if there is a finding that a proposed regulation may have an adverse impact on small business, the Joint Commission on Administrative Rules is notified at the time the proposed regulation is submitted to the Virginia Register of Regulations for publication. This analysis shall represent DPB's best estimate for the purposes of public review and comment on the proposed regulation.

Agency's Response to Economic Impact Analysis: The Department of Environmental Quality has reviewed the economic impact analysis prepared by the Department of Planning and Budget and has no comment.

Summary:

The amendments make certain elements of the major new source review (NSR) program consistent with the U.S. Environmental Protection Agency (EPA) regulations. More specifically, the amendments (i) change the definition of "baseline actual emissions" to allow the use of a 10-year lookback period rather than current five-year period and to allow the use of different lookback periods for different regulated NSR pollutants, (ii) amend plantwide applicability limits (PALs) requirements such that a PAL effective period is for 10 years rather than current five years, and (iii) amend the definition of "emissions unit" and add a definition of "replacement unit" to enable the use of the baseline actual emissions of the unit being replaced and the projected actual emissions of the replacement unit.

9VAC5-80-1615. Definitions.

A. As used in this article, all words or terms not defined herein shall have the meanings given them in 9VAC5-10 (General Definitions), unless otherwise required by context.

B. For the purpose of this article, 9VAC5-50-280, and applying this article in the context of the Regulations for the Control and Abatement of Air Pollution and related uses, the words or terms shall have the meanings given them in subsection C of this section:

C. Terms defined.

"Actual emissions" means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with subdivisions a ~~through~~, b, and c of this definition, except that this definition shall not apply for calculating whether a significant emissions increase has

occurred, or for establishing a PAL under 9VAC5-80-1865. Instead, the definitions of "projected actual emissions" and "baseline actual emissions" shall apply for those purposes.

a. In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period that precedes the particular date and that is representative of normal source operation. The board will allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

b. The board may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

c. For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

"Actuals PAL for a major stationary source" means a PAL based on the baseline actual emissions of all emissions units at the source that emit or have the potential to emit the PAL pollutant.

"Administrator" means the administrator of the U.S. Environmental Protection Agency (EPA) or an authorized representative.

"Adverse impact on visibility" means visibility impairment that interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the federal class I area. This determination shall be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with (i) times of visitor use of the federal class I areas, and (ii) the frequency and timing of natural conditions that reduce visibility.

"Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally and state enforceable limits that restrict the operating rate, ~~or~~ hours of operation, or both) and the most stringent of the following:

- a. The applicable standards as set forth in 40 CFR Parts 60, 61, and 63;
- b. The applicable implementation plan emissions limitation including those with a future compliance date; or
- c. The emissions limit specified as a federally and state enforceable permit condition, including those with a future compliance date.

For the purposes of actuals PALs, "allowable emissions" shall also be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

"Applicable federal requirement" means all of, but not limited to, the following as they apply to emissions units in a source subject to this article (including requirements that have been promulgated or approved by the administrator through rulemaking at the time of permit issuance but have future-effective compliance dates):

- a. Any standard or other requirement provided for in an implementation plan established pursuant to § 110 or §-111(d) of the federal Clean Air Act, including any source-specific provisions such as consent agreements or orders.
- b. Any limit or condition in any construction permit issued under the new source review program or in any operating permit issued pursuant to the state operating permit program.
- c. Any emission standard, alternative emission standard, alternative emission limitation, equivalent emission limitation or other requirement established pursuant to § 112 or §-129 of the federal Clean Air Act as amended in 1990.
- d. Any new source performance standard or other requirement established pursuant to § 111 of the federal Clean Air Act, and any emission standard or other requirement established pursuant to § 112 of the federal Clean Air Act before it was amended in 1990.
- e. Any limitations and conditions or other requirement in a Virginia regulation or program that has been approved by EPA under subpart E of 40 CFR Part 63 for the purposes of implementing and enforcing § 112 of the federal Clean Air Act.
- f. Any requirement concerning accident prevention under § 112(r)(7) of the federal Clean Air Act.
- g. Any compliance monitoring requirements established pursuant to either § 504(b) or §-114(a)(3) of the federal Clean Air Act.
- h. Any standard or other requirement for consumer and commercial products under § 183(e) of the federal Clean Air Act.
- i. Any standard or other requirement for tank vessels under § 183(f) of the federal Clean Air Act.
- j. Any standard or other requirement in 40 CFR Part 55 to control air pollution from outer continental shelf sources.
- k. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act unless the administrator has determined that such requirements need not be contained in a permit issued under this article.
- l. With regard to temporary sources subject to 9VAC5-80-130, (i) any ambient air quality standard, except applicable state requirements, and (ii) requirements regarding increments or visibility as provided in this article.

"Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with the following:

a. For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner within the five-year period immediately preceding when the owner begins actual construction of the project. The board will allow the use of a different time period upon a determination that it is more representative of normal source operation.

(1) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(2) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

(3) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for the emissions units being changed. ~~The same consecutive 24 month period shall be used for each different regulated NSR pollutant unless the owner can demonstrate to the satisfaction of the board that a different consecutive 24 month period for a different pollutant or pollutants is more appropriate due to extenuating circumstances.~~ A different consecutive 24-month period may be used for each regulated NSR pollutant.

(4) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subdivision a (2) of this definition.

b. For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner within the ~~five-year~~ 10-year period immediately preceding either the date the owner begins actual construction of the project, or the date a complete permit application is received by the board for a permit required under this article, whichever is earlier, except that the ~~five-year~~ 10-year period shall not include any period earlier than November 15, 1990. ~~The board will allow the use of a different time period upon a determination that it is more representative of normal source operation.~~

(1) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

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(2) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

(3) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the administrator proposed or promulgated under 40 CFR Part 63, the baseline actual emissions need only be adjusted if the board has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of 9VAC5-80-2120 K.

(4) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all the emissions units being changed. ~~The same consecutive 24-month period shall be used for each different regulated NSR pollutant unless the owner can demonstrate to the satisfaction of the board that a different consecutive 24-month period for a different pollutant or pollutants is more appropriate due to extenuating circumstances. A different consecutive 24-month period may be used for each regulated NSR pollutant.~~

(5) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subdivisions b (2) and b (3) of this definition.

c. For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

d. For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in subdivision a of this definition, for other existing emissions units in accordance with the procedures contained in subdivision b of this definition, and for a new emissions unit in accordance with the procedures contained in subdivision c of this subsection.

"Baseline area":

a. Means any intrastate area (and every part thereof) designated as attainment or unclassifiable under § 107(d)(1)(A)(ii) or (iii) of the federal Clean Air Act in which the major source or major modification establishing

the minor source baseline date would construct or would have an air quality impact for the pollutant for which the baseline date is established, as follows: (i) for SO₂, NO₂, or PM₁₀, equal to or greater than 1 µg/m³ (annual average); or (ii) for PM_{2.5}, equal to or greater than 0.3 µg/m³ (annual average).

b. Area redesignations under § 107(d)(1)(A)(ii) or (iii) of the federal Clean Air Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification that:

- (1) Establishes a minor source baseline date; or
- (2) Is subject to this article or 40 CFR 52.21 and would be constructed in the same state as the state proposing the redesignation.

c. Any baseline area established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM₁₀ increments, except that such baseline area shall not remain in effect if the board rescinds the corresponding minor source baseline date in accordance with subdivision d of the definition of "baseline date."

"Baseline concentration"

a. Means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:

- (1) The actual emissions representative of sources in existence on the applicable minor source baseline date, except as provided in subdivision b of this definition; and
- (2) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.

b. The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

- (1) Actual emissions from any major stationary source on which construction commenced after the major source baseline date; and
- (2) Actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.

"Baseline date"

a. "Major source baseline date" means:

- (1) In the case of PM₁₀ and sulfur dioxide, January 6, 1975;
- (2) In the case of nitrogen dioxide, February 8, 1988; and
- (3) In the case of PM_{2.5}, October 20, 2010.

b. "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or

a major modification subject to this article submits a complete application under this article. The trigger date is:

- (1) In the case of PM₁₀ and sulfur dioxide, August 7, 1977;
- (2) In the case of nitrogen dioxide, February 8, 1988; and
- (3) In the case of PM_{2.5}, October 20, 2011.

c. The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:

- (1) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under § 107(d)(1)(A)(ii) or (iii) of the federal Clean Air Act for the pollutant on the date of its complete application under this article or 40 CFR 52.21; and
- (2) In the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.

d. Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM₁₀ increments, except that the board may rescind any such minor source baseline date where it can be shown, to the satisfaction of the board, that the emissions increase from the major stationary source, or the net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM₁₀ emissions.

"Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit that are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities other than preparatory activities that mark the initiation of the change.

"Best available control technology" or "BACT" means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant that would be emitted from any proposed major stationary source or major modification that the board, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant that would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60, 61, and 63. If the

board determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means that achieve equivalent results.

"Building, structure, facility or installation" means all of the pollutant-emitting activities that belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., that have the same first two-digit code) as described in the Standard Industrial Classification Manual (see 9VAC5-20-21).

"Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility that will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam that was not in widespread use as of November 15, 1990.

"Clean coal technology demonstration project" means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology," up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for EPA. The federal contribution for a qualifying project shall be at least 20% of the total cost of the demonstration project.

"Commence" as applied to construction of a major stationary source or major modification, means that the owner has all necessary preconstruction approvals or permits and either has:

- a. Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
- b. Entered into binding agreements or contractual obligations, that cannot be canceled or modified without substantial loss to the owner, to undertake a program of actual construction of the source, to be completed within a reasonable time.

"Complete" means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application and the provisions of § 10.1-1321.1 of the Virginia Air Pollution Control Law have been met. Designating an application complete for the

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purposes of permit processing does not preclude the board from requesting or accepting any additional information.

"Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.

"Continuous emissions monitoring system" or "CEMS" means all of the equipment that may be required to meet the data acquisition and availability requirements of this article, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

"Continuous emissions rate monitoring system" or "CERMS" means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

"Continuous parameter monitoring system" or "CPMS" means all of the equipment necessary to meet the data acquisition and availability requirements of this article, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and to record average operational parameter value(s) on a continuous basis.

"Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

"Emissions unit" means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit. For purposes of this definition, there are two types of emissions units: (i) a new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than two years from the date such emissions unit first operated; and (ii) an existing emissions unit is any emissions unit that is not a new emissions unit. A replacement unit is an existing emissions unit.

"Enforceable as a practical matter" means that the permit contains emission limitations that are enforceable by the board or the department and meet the following criteria:

- a. Are permanent;
- b. Contain a legal obligation for the owner to adhere to the terms and conditions;
- c. Do not allow a relaxation of a requirement of the implementation plan;
- d. Are technically accurate and quantifiable;

e. Include averaging times or other provisions that allow at least monthly (or a shorter period if necessary to be consistent with the implementation plan) checks on compliance. This may include, but not be limited to, the following: compliance with annual limits on a rolling basis, monthly or shorter limits, and other provisions consistent with this article and other regulations of the board; and

f. Require a level of recordkeeping, reporting and monitoring sufficient to demonstrate compliance.

"Federal land manager" means, with respect to any lands in the United States, the secretary of the department with authority over such lands.

"Federally enforceable" means all limitations and conditions that are enforceable by the administrator and citizens under the federal Clean Air Act or that are enforceable under other statutes administered by the administrator. Federally enforceable limitations and conditions include, but are not limited to, the following:

a. Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to § 112 of the federal Clean Air Act as amended in 1990.

b. New source performance standards established pursuant to § 111 of the federal Clean Air Act, and emission standards established pursuant to § 112 of the federal Clean Air Act before it was amended in 1990.

c. All terms and conditions (unless expressly designated as not federally enforceable) in a federal operating permit, including any provisions that limit a source's potential to emit.

d. Limitations and conditions that are part of an implementation plan established pursuant to § 110, §-111(d) or §-129 of the federal Clean Air Act.

e. Limitations and conditions (unless expressly designated as not federally enforceable) that are part of a federal construction permit issued under 40 CFR 52.21 or a new source review permit issued under regulations approved by the EPA into the implementation plan.

f. Limitations and conditions (unless expressly designated as not federally enforceable) that are part of a state operating permit where the permit and the permit program pursuant to which it was issued meet all of the following criteria:

- (1) The operating permit program has been approved by the EPA into the implementation plan under § 110 of the federal Clean Air Act;
- (2) The operating permit program imposes a legal obligation that operating permit holders adhere to the terms and limitations of such permits and provides that permits that do not conform to the operating permit program requirements and the requirements of EPA's

underlying regulations may be deemed not "federally enforceable" by EPA;

(3) The operating permit program requires that all emission limitations, controls, and other requirements imposed by such permits will be at least as stringent as any other applicable limitations and requirements contained in the implementation plan or enforceable under the implementation plan, and that the program may not issue permits that waive, or make less stringent, any limitations or requirements contained in or issued pursuant to the implementation plan, or that are otherwise "federally enforceable";

(4) The limitations, controls, and requirements in the permit in question are permanent, quantifiable, and otherwise enforceable as a practical matter; and

(5) The permit in question was issued only after adequate and timely notice and opportunity for comment by the EPA and the public.

g. Limitations and conditions in a regulation of the board or program that has been approved by the EPA under subpart E of 40 CFR Part 63 for the purposes of implementing and enforcing § 112 of the federal Clean Air Act.

h. Individual consent agreements that the EPA has legal authority to create.

"Federal operating permit" means a permit issued under the federal operating permit program.

"Federal operating permit program" means an operating permit system (i) for issuing terms and conditions for major stationary sources, (ii) established to implement the requirements of Title V of the federal Clean Air Act and associated regulations, and (iii) codified in Article 1 (9VAC5-80-50 et seq.), Article 2 (9VAC5-80-310 et seq.), Article 3 (9VAC5-80-360 et seq.), and Article 4 (9VAC5-80-710 et seq.) of this part.

"Fugitive emissions" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"High terrain" means any area having an elevation 900 feet or more above the base of the stack of a source.

"Indian governing body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

"Indian reservation" means any federally recognized reservation established by treaty, agreement, executive order, or act of Congress.

"Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice, but would have substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least

comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.

"Lowest achievable emission rate" or "LAER" is as defined in 9VAC5-80-2010 C.

"Locality particularly affected" means any locality that bears any identified disproportionate material air quality impact that would not be experienced by other localities.

"Low terrain" means any area other than high terrain.

"Major emissions unit" means (i) any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or (ii) any emissions unit that emits or has the potential to emit the PAL pollutant for nonattainment areas in an amount that is equal to or greater than the major source threshold for the PAL pollutant in subdivision a (1) of the definition of "major stationary source" in 9VAC5-80-2010 C.

"Major modification"

a. Means any physical change in or change in the method of operation of a major stationary source that would result in a significant emissions increase of a regulated NSR pollutant, and a significant net emissions increase of that pollutant from the major stationary source.

b. Any significant emissions increase from any emissions units or net emissions increase at a major stationary source that is significant for volatile organic compounds or NO_x shall be considered significant for ozone.

c. A physical change or change in the method of operation shall not include the following:

(1) Routine maintenance, repair and replacement.

(2) Use of an alternative fuel or raw material by reason of an order under § 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plant pursuant to the federal Power Act.

(3) Use of an alternative fuel by reason of any order or rule under § 125 of the federal Clean Air Act.

(4) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.

(5) Use of an alternative fuel or raw material by a stationary source that:

(a) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally and state enforceable permit condition that was established after January 6, 1975, pursuant to 40 CFR 52.21 or this chapter; or

(b) The source is approved to use under any permit issued under 40 CFR 52.21 or this chapter.

(6) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally and state enforceable permit condition that

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was established after January 6, 1975, pursuant to 40 CFR 52.21 or this chapter.

(7) Any change in ownership at a stationary source.

(8) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(a) The applicable implementation plan; and

(b) Other requirements necessary to attain and maintain the ambient air quality standards during the project and after it is terminated.

(9) The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.

(10) The reactivation of a very clean coal-fired electric utility steam generating unit.

d. This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under 9VAC5-80-1865 for a PAL for that pollutant. Instead, the definition of "PAL major modification" shall apply.

"Major new source review (NSR) permit" means a permit issued under the major new source review program.

"Major new source review (major NSR) program" means a preconstruction review and permit program (i) for new major stationary sources or major modifications (physical changes or changes in the method of operation), (ii) established to implement the requirements of §§ 112, 165 and 173 of the federal Clean Air Act and associated regulations, and (iii) codified in Article 7 (9VAC5-80-1400 et seq.), Article 8 (9VAC5-80-1605 et seq.) and Article 9 (9VAC5-80-2000 et seq.) of this part.

"Major stationary source"

a. Means:

(1) Any of the following stationary sources of air pollutants that emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant:

(a) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input.

(b) Coal cleaning plants (with thermal dryers).

(c) Kraft pulp mills.

(d) Portland cement plants.

(e) Primary zinc smelters.

(f) Iron and steel mill plants.

(g) Primary aluminum ore reduction plants.

(h) Primary copper smelters.

(i) Municipal incinerators capable of charging more than 250 tons of refuse per day.

(j) Hydrofluoric acid plants.

(k) Sulfuric acid plants.

(l) Nitric acid plants.

(m) Petroleum refineries.

(n) Lime plants.

(o) Phosphate rock processing plants.

(p) Coke oven batteries.

(q) Sulfur recovery plants.

(r) Carbon black plants (furnace process).

(s) Primary lead smelters.

(t) Fuel conversion plants.

(u) Sintering plants.

(v) Secondary metal production plants.

(w) Chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140).

(x) Fossil fuel boilers (or combination of them) totaling more than 250 million British thermal units per hour heat input.

(y) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.

(z) Taconite ore processing plants.

(aa) Glass fiber processing plants.

(bb) Charcoal production plants.

(2) Notwithstanding the stationary source size specified in subdivision a (1) of this definition, any stationary source that emits, or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant; or

(3) Any physical change that would occur at a stationary source not otherwise qualifying under subdivision a (1) or a (2) of this definition as a major stationary source, if the change would constitute a major stationary source by itself.

b. A major stationary source that is major for volatile organic compounds or NO_x shall be considered major for ozone.

c. The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this article whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

(1) Coal cleaning plants (with thermal dryers).

(2) Kraft pulp mills.

(3) Portland cement plants.

(4) Primary zinc smelters.

(5) Iron and steel mills.

(6) Primary aluminum ore reduction plants.

- (7) Primary copper smelters.
- (8) Municipal incinerators capable of charging more than 250 tons of refuse per day.
- (9) Hydrofluoric, sulfuric, or nitric acid plants.
- (10) Petroleum refineries.
- (11) Lime plants.
- (12) Phosphate rock processing plants.
- (13) Coke oven batteries.
- (14) Sulfur recovery plants.
- (15) Carbon black plants (furnace process).
- (16) Primary lead smelters.
- (17) Fuel conversion plants.
- (18) Sintering plants.
- (19) Secondary metal production plants.
- (20) Chemical process plants (which shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140).
- (21) Fossil-fuel boilers (or combination of them) totaling more than 250 million British thermal units per hour heat input.
- (22) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.
- (23) Taconite ore processing plants.
- (24) Glass fiber processing plants.
- (25) Charcoal production plants.
- (26) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input.
- (27) Any other stationary source category that, as of August 7, 1980, is being regulated under 40 CFR Parts 60 and 61.

"Minor new source review (NSR) permit" means a permit issued under the minor new source review program.

"Minor new source review (minor NSR) program" means a preconstruction review and permit program (i) for new stationary sources or modifications (physical changes or changes in the method of operation) that are not subject to review under the major new source review program, (ii) established to implement the requirements of §§ 110(a)(2)(C) and 112 of the federal Clean Air Act and associated regulations, and (iii) codified in Article 6 (9VAC5-80-1100 et seq.) of this part.

"Necessary preconstruction approvals or permits" means those permits required under NSR programs that are part of the applicable implementation plan.

"Net emissions increase" means:

- a. ~~Means, with~~ With respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:

- (1) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to 9VAC5-80-1605 G; and

- (2) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this subdivision shall be determined as provided in the definition of "baseline actual emissions," except that subdivisions a (3) and b (4) of that definition shall not apply.

b. An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:

- (1) The date five years before construction on the particular change commences; and
- (2) The date that the increase from the particular change occurs.

c. An increase or decrease in actual emissions is creditable only if (i) it occurs between the date five years before construction on the particular change commences and the date that the increase from the particular change occurs; and (ii) the board has not relied on it in issuing a permit for the source under this article (or the administrator under 40 CFR 52.21), which permit is in effect when the increase in actual emissions from the particular change occurs.

d. An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

e. An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

f. A decrease in actual emissions is creditable only to the extent that:

- (1) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
- (2) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins; and
- (3) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

g. An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that

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requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

h. Subdivision a of the definition of "actual emissions" shall not apply for determining creditable increases and decreases.

"New source performance standard" or "NSPS" means the U.S. Environmental Protection Agency Regulations on Standards of Performance for New Stationary Sources as promulgated in 40 CFR Part 60 and designated in 9VAC5-50-410.

"New source review (NSR) permit" means a permit issued under the new source review program.

"New source review (NSR) program" means a preconstruction review and permit program (i) for new stationary sources or modifications (physical changes or changes in the method of operation); (ii) established to implement the requirements of §§ 110(a)(2)(C), 112 (relating to permits for hazardous air pollutants), 165 (relating to permits in prevention of significant deterioration areas), and 173 (relating to permits in nonattainment areas) of the federal Clean Air Act and associated regulations; and (iii) codified in Article 6 (9VAC5-80-1100 et seq.), Article 7 (9VAC5-80-1400 et seq.), Article 8 (9VAC5-80-1605 et seq.) and Article 9 (9VAC5-80-2000 et seq.) of this part.

"Plantwide applicability limitation ~~(PAL)~~ or "PAL" means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established sourcewide in accordance with 9VAC5-80-1865.

"PAL effective date" generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

"PAL effective period" means the period beginning with the PAL effective date and ending ~~five~~ 10 years later.

"PAL major modification" means, notwithstanding the definitions for major modification and net emissions increase, any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

"PAL permit" means the state operating permit issued by the board that establishes a PAL for a major stationary source.

"PAL pollutant" means the pollutant for which a PAL is established at a major stationary source.

"Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment, and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally

and state enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source. For the purposes of actuals PALs, any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment, and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable or enforceable as a practical matter by the state.

"Predictive emissions monitoring system" or "PEMS" means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and calculate and record the mass emissions rate (for example, pounds per hour) on a continuous basis.

"Project" means a physical change in, or change in the method of operation of, an existing major stationary source.

"Projected actual emissions" means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the five years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source. In determining the projected actual emissions (before beginning actual construction), the owner of the major stationary source:

- a. Shall consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities, and compliance plans under the approved implementation plan;
- b. Shall include fugitive emissions to the extent quantifiable and emissions associated with startups, shutdowns, and malfunctions; and
- c. Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have emitted during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project, including any increased utilization due to product demand growth, provided such exclusion shall not reduce any calculated increases in emissions that are caused by, result from, or are related to the particular project; or

d. In lieu of using the method set out in subdivisions a through c of this definition, may elect to use the emissions unit's potential to emit, in tons per year.

"Reactivation of a very clean coal-fired electric utility steam generating unit" means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

- a. Has not been in operation for the two-year period prior to the enactment of the federal Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the department's emissions inventory at the time of enactment;
- b. Was equipped prior to ~~shut-down~~ shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85% and a removal efficiency for particulates of no less than 98%;
- c. Is equipped with low-NOX burners prior to the time of commencement of operations following reactivation; and
- d. Is otherwise in compliance with the requirements of the federal Clean Air Act.

"Reasonably available control technology" or "RACT" means the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available, considering technological and economic feasibility.

"Regulated NSR pollutant" means:

- a. Any pollutant for which an ambient air quality standard has been promulgated. This includes, but is not limited to, the following:
 - (1) PM_{2.5} emissions and PM₁₀ emissions shall include gaseous emissions from a source or activity that condense to form particulate matter at ambient temperatures. On or after January 1, 2011, such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM_{2.5} and PM₁₀ issued under this article. Compliance with emissions limitations for PM_{2.5} and PM₁₀ issued prior to this date shall not be based on condensable particulate matter unless required by the terms and conditions of the permit. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this article.
 - (2) Any pollutant identified under this subdivision as a constituent or precursor to a pollutant for which an ambient air quality standard has been promulgated. Precursors identified for the purposes of this article shall be the following:
 - (a) Volatile organic compounds and nitrogen oxides are precursors to ozone in all attainment and unclassifiable areas.

(b) Sulfur dioxide is a precursor to PM_{2.5} in all attainment and unclassifiable areas.

(c) Nitrogen oxides are presumed to be precursors to PM_{2.5} in all attainment and unclassifiable areas, unless the board determines that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient PM_{2.5} concentrations.

(d) Volatile organic compounds are presumed not to be precursors to PM_{2.5} in any attainment or unclassifiable area, unless the board determines that emissions of volatile organic compounds from sources in a specific area are a significant contributor to that area's ambient PM_{2.5} concentrations.

b. Any pollutant that is subject to any standard promulgated under § 111 of the federal Clean Air Act.

c. Any class I or II substance subject to a standard promulgated under or established by Title VI of the federal Clean Air Act.

d. Any pollutant that otherwise is subject to regulation under the federal Clean Air Act; except that any or all hazardous air pollutants either listed in § 112 of the federal Clean Air Act or added to the list pursuant to § 112(b)(2), which have not been delisted pursuant to § 112(b)(3), are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under § 108 of the federal Clean Air Act.

"Replacement unit" means an emissions unit for which all the following criteria are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

- a. The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit.
- b. The emissions unit is identical to or functionally equivalent to the replaced emissions unit.
- c. The replacement does not change the basic design parameters of the process unit.
- d. The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

"Repowering" means:

- a. Replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the administrator, in consultation with the Secretary of Energy,

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a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

b. Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

c. The board may give expedited consideration to permit applications for any source that satisfies the requirements of this definition and is granted an extension under § 409 of the federal Clean Air Act.

"Secondary emissions" means emissions that would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this article, secondary emissions shall be specific, well defined, quantifiable, and affect the same general area as the stationary source or modification that causes the secondary emissions. Secondary emissions include emissions from any offsite support facility that would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions that come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

"Significant" means:

a. In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

| Pollutant | Emissions Rate |
|--------------------------|--|
| Carbon Monoxide | 100 tons per year (tpy) |
| Nitrogen Oxides | 40 tpy |
| Sulfur Dioxide | 40 tpy |
| Particulate Matter (TSP) | 25 tpy |
| PM ₁₀ | 15 tpy |
| PM _{2.5} | 10 tpy of direct PM _{2.5} emissions; 40 tpy of SO ₂ emissions; 40 tpy of NO _x emissions unless demonstrated not to be a PM _{2.5} precursor under the definition of "regulated NSR pollutant" |

| | |
|---|---|
| Ozone | 40 tpy of volatile organic compounds or NO _x |
| Lead | 0.6 tpy |
| Fluorides | 3 tpy |
| Sulfuric Acid Mist | 7 tpy |
| Hydrogen Sulfide (H ₂ S) | 10 tpy |
| Total Reduced Sulfur (including H ₂ S) | 10 tpy |
| Reduced Sulfur Compounds (including H ₂ S) | 10 tpy |
| Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans) | 3.5 x 10 ⁻⁶ tpy |
| Municipal waste combustor metals (measured as particulate matter) | 15 tpy |
| Municipal waste combustor acid gases (measured as the sum of SO ₂ and HCl) | 40 tpy |
| Municipal solid waste landfills emissions (measured as nonmethane organic compounds) | 50 tpy |

b. In reference to a net emissions increase or the potential of a source to emit a regulated NSR pollutant that subdivision a of this definition does not list, any emissions rate.

c. Notwithstanding subdivision a of this definition, any emissions rate or any net emissions increase associated with a major stationary source or major modification that would construct within 10 kilometers of a class I area, and have an impact on such area equal to or greater than 1 µg/m³ (24-hour average).

"Significant emissions increase" means, for a regulated NSR pollutant, an increase in emissions that is significant for that pollutant.

"Significant emissions unit" means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is significant for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit.

"Small emissions unit" means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant.

"State enforceable" means all limitations and conditions that are enforceable as a practical matter, including any regulation of the board, those requirements developed pursuant to 9VAC5-170-160, requirements within any applicable order or variance, and any permit requirements established pursuant to this chapter.

"State operating permit" means a permit issued under the state operating permit program.

"State operating permit program" means an operating permit program (i) for issuing limitations and conditions for stationary sources; (ii) promulgated to meet the EPA's minimum criteria for federal enforceability, including adequate notice and opportunity for the EPA and public comment prior to issuance of the final permit, and practicable enforceability; and (iii) codified in Article 5 (9VAC5-80-800 et seq.) of this part.

"Stationary source" means any building, structure, facility, or installation that emits or may emit a regulated NSR pollutant.

"Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of five years or less, and that complies with the applicable implementation plan and other requirements necessary to attain and maintain the ambient air quality standards during the project and after it is terminated.

9VAC5-80-1865. Actuals plantwide applicability limits (PALs).

A. The board may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements of this section. The term "PAL" shall mean "actuals PAL" throughout this section.

1. Any physical change in or change in the method of operation of a major stationary source that maintains its total sourcewide emissions below the PAL level, meets the requirements of this section, and complies with the PAL permit:

- a. Is not a major modification for the PAL pollutant;
- b. Does not have to be approved through this article; and
- c. Is not subject to the provisions in 9VAC5-80-1605 C (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program).

2. Except as provided under subdivision 1 c of this subsection, a major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

B. As part of a permit application requesting a PAL, the owner of a major stationary source shall submit the following information to the board for approval:

- 1. A list of all emissions units at the source designated as small, significant, or major based on their potential to emit.

In addition, the owner of the source shall indicate which, if any, federal or state applicable requirements, emission limitations, or work practices apply to each unit.

2. Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.

3. The calculation procedures that the major stationary source owner proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by subdivision N 1 of this section.

C. The general requirements set forth in this subsection shall apply to the establishment of PALs.

1. The board may establish a PAL at a major stationary source, provided that at a minimum, the following requirements are met:

a. The PAL shall impose an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source owner shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

b. The PAL shall be established in a PAL permit that meets the public participation requirements in subsection D of this section.

c. The PAL permit shall contain all the requirements of subsection F of this section.

d. The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.

e. Each PAL shall regulate emissions of only one pollutant.

f. Each PAL shall have a PAL effective period of ~~five~~ 10 years.

g. The owner of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in subsections M ~~through N~~, and O of this section for each emissions unit under the PAL through the PAL effective period.

2. At no time during or after the PAL effective period are emissions reductions of a PAL pollutant that occur during

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the PAL effective period creditable as decreases for purposes of offsets under 9VAC5-80-2120 F through N unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

D. PALs for existing major stationary sources shall be established, renewed, or increased through the public participation procedures prescribed in the applicable permit programs identified in the definition of PAL permit. In no case may the board issue a PAL permit unless the board provides the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The board will address all material comments before taking final action on the permit.

E. The actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant (as reflected in the definition of "significant") level for the PAL pollutant. When establishing the actuals PAL level, for a PAL pollutant, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all existing emissions units. ~~The same consecutive 24-month period shall be used for each different PAL pollutant unless the owner can demonstrate to the satisfaction of the board that a different consecutive 24-month period for a different pollutant or pollutants is more appropriate due to extenuating circumstances. However, a different consecutive 24-month period may be used for each different PAL pollutant.~~ Emissions associated with units that were permanently shutdown after this 24-month period shall be subtracted from the PAL level. Emissions from units on which actual construction began after the 24-month period shall be added to the PAL level in an amount equal to the potential to emit of the units. The board will specify a reduced PAL level or levels (in tons per year) in the PAL permit to become effective on the future compliance dates of any applicable federal or state regulatory requirements that the board is aware of prior to issuance of the PAL permit. For instance, if the source owner will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO_x to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such units.

F. The PAL permit shall contain, at a minimum, the following information:

1. The PAL pollutant and the applicable sourcewide emission limitation in tons per year.
2. The PAL permit effective date and the expiration date of the PAL (PAL effective period).
3. Specification in the PAL permit that if a major stationary source owner applies to renew a PAL in accordance with subsection J of this section before the end

of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the board, or until the board determines that the revised PAL permit will not be issued.

4. A requirement that emission calculations for compliance purposes shall include emissions from startups, shutdowns, and malfunctions.

5. A requirement that, once the PAL expires, the major stationary source is subject to the requirements of subsection I of this section.

6. The calculation procedures that the major stationary source owner shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by subdivision N 1 of this section.

7. A requirement that the major stationary source owner monitor all emissions units in accordance with the provisions under subsection M of this section.

8. A requirement to retain the records required under subsection N of this section on site. Such records may be retained in an electronic format.

9. A requirement to submit the reports required under subsection O of this section by the required deadlines.

10. Any other requirements that the board deems necessary to implement and enforce the PAL.

G. The PAL effective period shall be ~~five~~ 10 years.

H. The requirements for the reopening of the PAL permit set forth in this subsection shall apply to actuals PALs.

1. During the PAL effective period, the board will reopen the PAL permit to:

- a. Correct typographical or calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;
- b. Reduce the PAL if the owner of the major stationary source creates creditable emissions reductions for use as offsets under 9VAC5-80-2120 F through N; and
- c. Revise the PAL to reflect an increase in the PAL as provided under subsection L of this section.

2. The board may reopen the PAL permit for any of the following reasons:

- a. Reduce the PAL to reflect newly applicable federal requirements (e.g., NSPS) with compliance dates after the PAL effective date.
- b. Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the board may impose on the major stationary source.
- c. Reduce the PAL if the board determines that a reduction is necessary to avoid causing or contributing to a violation of an ambient air standard or ambient air

increment in 9VAC5-80-1635, or to an adverse impact on an air quality related value that has been identified for a federal class I area by a federal land manager and for which information is available to the general public.

3. Except for the permit reopening in subdivision 1 a of this subsection for the correction of typographical or calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of subsection D of this section.

I. Any PAL that is not renewed in accordance with the procedures in subsection J of this section shall expire at the end of the PAL effective period, and the following requirements shall apply:

1. Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the following procedures:

a. Within the time frame specified for PAL renewals in subdivision J 2 of this section, the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the board) by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under subdivision ~~J 5~~ K 4 of this section, such distribution shall be made as if the PAL had been adjusted.

b. The board will decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the board determines is appropriate.

2. Each emissions unit shall comply with the allowable emission limitation on a 12-month rolling basis. The board may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.

3. Until the board issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under subdivision 1 b of this subsection, the source shall continue to comply with a sourcewide, multiunit emissions cap equivalent to the level of the PAL emission limitation.

4. Any physical change in or change in the method of operation at the major stationary source will be subject to major NSR program requirements if such change meets the definition of "major modification."

5. The major stationary source owner shall continue to comply with any state or federal applicable requirements (such as BACT, RACT, or NSPS) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to 9VAC5-80-1605 C, but were eliminated by the PAL in accordance with the provisions in subdivision A 1 c of this section.

J. The requirements for the renewal of the PAL permit set forth in this subsection shall apply to actuals PALs.

1. The board will follow the procedures specified in subsection D of this section in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the board.

2. A major stationary source owner shall submit a timely application to the board to request renewal of a PAL. A timely application is one that is submitted at least ~~6~~ six months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued, or until the board determines that the revised permit with the renewed PAL will not be issued, and a permit is issued pursuant to subsection I of this section.

3. The application to renew a PAL permit shall contain the following information:

a. The information required in subsection B of this section.

b. A proposed PAL level.

c. The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).

d. Any other information the owner wishes the board to consider in determining the appropriate level for renewing the PAL.

K. The requirements for the adjustment of the PAL set forth in this subsection shall apply to actuals PALs. In determining whether and how to adjust the PAL, the board will consider the options outlined in subdivisions 1 and 2 of this subsection. However, in no case may any such adjustment fail to comply with subdivision 3 of this subsection.

1. If the emissions level calculated in accordance with subsection E of this section is equal to or greater than 80% of the PAL level, the board may renew the PAL at the same level without considering the factors set forth in subdivision 2 of this subsection; or

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2. The board may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the board in a written rationale.
 3. Notwithstanding subdivisions 1 and 2 of this subsection:
 - a. If the potential to emit of the major stationary source is less than the PAL, the board will adjust the PAL to a level no greater than the potential to emit of the source; and
 - b. The board will not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of subsection L of this section.
 4. If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if the board has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or federal operating permit renewal, whichever occurs first.
- L. The requirements for increasing a PAL during the PAL effective period set forth in this subsection shall apply to actuals PALs.
1. The board may increase a PAL emission limitation only if the owner of the major stationary source complies with the following provisions:
 - a. The owner of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions units contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.
 - b. As part of this application, the major stationary source owner shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions units exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding ~~five~~ 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit shall currently comply.
 - c. The owner obtains a major NSR permit for all emissions units identified in subdivision 1 a of this subsection, regardless of the magnitude of the emissions increase resulting from them (i.e., no significant levels apply). These emissions units shall comply with any emissions requirements resulting from the major NSR program process (e.g., BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.
 2. The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
 3. The board will calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT equivalent controls as determined in accordance with subdivision 1 b of this subsection), plus the sum of the baseline actual emissions of the small emissions units.
 4. The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of subsection D of this section.
- M. The requirements for monitoring the PAL set forth in this subsection apply to actuals PALs.
1. The general requirements for monitoring a PAL set forth in this subdivision apply to actuals PALs.
 - a. Each PAL permit shall contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit shall be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system shall meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.
 - b. The PAL monitoring system shall employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in subdivision 2 of this subdivision and must be approved by the board.
 - c. Notwithstanding subdivision 1 b of this subdivision, the owner may also employ an alternative monitoring approach that meets subdivision 1 a of this subsection if approved by the board.
 - d. Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.
 2. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in subdivisions 3 through 9 of this subsection:

- a. Mass balance calculations for activities using coatings or solvents;
 - b. CEMS;
 - c. CPMS or PEMS; and
 - d. Emission factors.
3. An owner using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:
- a. Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;
 - b. Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and
 - c. Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner shall use the highest value of the range to calculate the PAL pollutant emissions unless the board determines there is site-specific data or a site-specific monitoring program to support another content within the range.
4. An owner using CEMS to monitor PAL pollutant emissions shall meet the following requirements:
- a. CEMS shall comply with applicable Performance Specifications found in 40 CFR Part 60, Appendix B; and
 - b. CEMS shall sample, analyze, and record data at least every 15 minutes while the emissions unit is operating.
5. An owner using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:
- a. The CPMS or the PEMS shall be based on current site-specific data demonstrating a correlation between the monitored parameters and the PAL pollutant emissions across the range of operation of the emissions unit; and
 - b. Each CPMS or PEMS shall sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the board, while the emissions unit is operating.
6. An owner using emission factors to monitor PAL pollutant emissions shall meet the following requirements:
- a. All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;
 - b. The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and
 - c. If technically practicable, the owner of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within six months of PAL permit issuance, unless the board determines that testing is not required.
7. A source owner shall record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.
8. Notwithstanding the requirements in subdivisions 3 through 7 of this subsection, where an owner of an emissions unit cannot demonstrate a correlation between the monitored parameters and the PAL pollutant emissions rate at all operating points of the emissions unit, the board will, at the time of permit issuance:
- a. Establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating points; or
 - b. Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameters and the PAL pollutant emissions is a violation of the PAL.
9. All data used to establish the PAL pollutant shall be revalidated through performance testing or other scientifically valid means approved by the board. Such testing shall occur at least once every five years after issuance of the PAL.
- N. The requirements for recordkeeping in the PAL permit set forth in this subsection shall apply to actuals PALs.
- 1. The PAL permit shall require an owner to retain a copy of all records necessary to determine compliance with any requirement of this section and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for five years from the date of such record.
 - 2. The PAL permit shall require an owner to retain a copy of the following records for the duration of the PAL effective period plus five years:
 - a. A copy of the PAL permit application and any applications for revisions to the PAL; and
 - b. Each annual certification of compliance pursuant to the federal operating permit and the data relied on in certifying the compliance.
- O. The owner shall submit semi-annual monitoring reports and prompt deviation reports to the board in accordance with the federal operating permit program. The reports shall meet the following requirements:
- 1. The semi-annual report shall be submitted to the board within 30 days of the end of each reporting period. This report shall contain the following information:
 - a. The identification of owner and operator and the permit number.

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b. Total annual emissions (tons per year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to subdivision N 1 of this section.

c. All data relied upon, including, but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions.

d. A list of any emissions units modified or added to the major stationary source during the preceding six-month period.

e. The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.

f. A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by subdivision M 7 of this section.

g. A signed statement by the responsible official (as defined by the federal operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

2. The major stationary source owner shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to 9VAC5-80-110 F 2 ~~B~~ b shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by 9VAC5-80-110 F 2 ~~B~~ b. The reports shall contain the following information:

a. The identification of owner and operator and the permit number;

b. The PAL requirement that experienced the deviation or that was exceeded;

c. Emissions resulting from the deviation or the exceedance; and

d. A signed statement by the responsible official (as defined by the applicable federal operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

3. The owner shall submit to the board the results of any revalidation test or method within three months after completion of such test or method.

P. The board will not issue a PAL that does not comply with the requirements of this section after September 1, 2006. The board may supersede any PAL that was established prior to

September 1, 2006, with a PAL that complies with the requirements of this section.

9VAC5-80-2010. Definitions.

A. As used in this article, all words or terms not defined here shall have the meanings given them in 9VAC5-10 (General Definitions), unless otherwise required by context.

B. For the purpose of this article, 9VAC5-50-270₂ and any related use, the words or terms shall have the meanings given them in subsection C of this section.

C. Terms defined.

"Actual emissions" means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with subdivisions a ~~through, b, and~~ c of this definition, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under 9VAC5-80-2144. Instead, the definitions of "projected actual emissions" and "baseline actual emissions" shall apply for those purposes.

a. In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The board will allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

b. The board may presume that the source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

c. For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

"Actuals PAL for a major stationary source" means a PAL based on the baseline actual emissions of all emissions units at the source₇ that emit or have the potential to emit the PAL pollutant.

"Administrator" means the administrator of the U.S. Environmental Protection Agency (EPA) or an authorized representative.

"Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally and state enforceable limits which restrict the operating rate, ~~or~~ hours of operation, or both) and the most stringent of the following:

a. The applicable standards set forth in 40 CFR Parts 60, 61 and 63;

b. Any applicable implementation plan emissions limitation including those with a future compliance date; or

c. The emissions limit specified as a federally and state enforceable permit condition, including those with a future compliance date.

For the purposes of actuals PALs, "allowable emissions" shall also be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

"Applicable federal requirement" means all of, but not limited to, the following as they apply to emissions units in a source subject to this article (including requirements that have been promulgated or approved by the administrator through rulemaking at the time of permit issuance but have future-effective compliance dates):

- a. Any standard or other requirement provided for in an implementation plan established pursuant to § 110 or §-111(d) of the federal Clean Air Act, including any source-specific provisions such as consent agreements or orders.
- b. Any limit or condition in any construction permit issued under the new source review program or in any operating permit issued pursuant to the state operating permit program.
- c. Any emission standard, alternative emission standard, alternative emission limitation, equivalent emission limitation, or other requirement established pursuant to § 112 or §-129 of the federal Clean Air Act as amended in 1990.
- d. Any new source performance standard or other requirement established pursuant to § 111 of the federal Clean Air Act, and any emission standard or other requirement established pursuant to § 112 of the federal Clean Air Act before it was amended in 1990.
- e. Any limitations and conditions or other requirement in a Virginia regulation or program that has been approved by EPA under subpart E of 40 CFR Part 63 for the purposes of implementing and enforcing § 112 of the federal Clean Air Act.
- f. Any requirement concerning accident prevention under § 112(r)(7) of the federal Clean Air Act.
- g. Any compliance monitoring requirements established pursuant to either § 504(b) or §-114(a)(3) of the federal Clean Air Act.
- h. Any standard or other requirement for consumer and commercial products under § 183(e) of the federal Clean Air Act.
- i. Any standard or other requirement for tank vessels under § 183(f) of the federal Clean Air Act.
- j. Any standard or other requirement in 40 CFR Part 55 to control air pollution from outer continental shelf sources.
- k. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act, unless the administrator has

determined that such requirements need not be contained in a permit issued under this article.

l. With regard to temporary sources subject to 9VAC5-80-130, (i) any ambient air quality standard, except applicable state requirements, and (ii) requirements regarding increments or visibility as provided in Article 8 (9VAC5-80-1605 et seq.) of this part.

"Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with the following:

a. For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner within the five-year period immediately preceding when the owner begins actual construction of the project. The board may allow the use of a different time period upon a determination that it is more representative of normal source operation.

(1) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(2) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

(3) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for the emissions units being changed. ~~The same consecutive 24-month period shall be used for each different regulated NSR pollutant unless the owner can demonstrate to the satisfaction of the board that a different consecutive 24-month period for a different pollutant or pollutants is more appropriate due to extenuating circumstances. A different consecutive 24-month period may be used for each regulated NSR pollutant.~~

(4) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subdivision a (2) of this definition.

b. For an existing emissions unit other than an electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner within the ~~five-year~~ 10-year period immediately preceding either the date the owner begins actual construction of the project, or the date a complete permit application is received by the board for a permit required either under

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this section or under a plan approved by the administrator, whichever is earlier, except that the ~~five-year~~ 10-year period shall not include any period earlier than November 15, 1990. The board will allow the use of a different time period upon a determination that it is more representative of normal source operation.

(1) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(2) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

(3) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the source shall currently comply, had such source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the administrator proposed or promulgated under 40 CFR Part 63, the baseline actual emissions need only be adjusted if the state has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of 9VAC5-80-2120 K.

(4) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for the emissions units being changed. ~~The same consecutive 24 month period shall be used for each different regulated NSR pollutant unless the owner can demonstrate to the satisfaction of the board that a different consecutive 24 month period for a different pollutant or pollutants is more appropriate due to extenuating circumstances. A different consecutive 24-month period may be used for each regulated NSR pollutant.~~

(5) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subdivisions b (2) and b (3) of this definition.

c. For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

d. For a PAL for a major stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in subdivision a of this definition, for

other existing emissions units in accordance with the procedures contained in subdivision b of this definition, and for a new emissions unit in accordance with the procedures contained in subdivision c of this definition.

"Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit ~~which~~ that are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

"Best available control technology" or "BACT" means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant that would be emitted from any proposed major stationary source or major modification that the board, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant that would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60, 61, and 63. If the board determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means that achieve equivalent results.

"Building, structure, facility, or installation" means all of the pollutant-emitting activities ~~which~~ that belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "major group" (i.e., which have the same two-digit code) as described in the "Standard Industrial Classification Manual," as amended by the supplement (see 9VAC5-20-21).

"Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post-combustion stage, at a new or existing facility that will achieve significant reductions in air emissions of sulfur

dioxide or nitrogen oxides associated with the utilization of coal in the generation of electricity, or process steam that was not in widespread use as of November 15, 1990.

"Clean coal technology demonstration project" means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology," up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the U.S. EPA. The federal contribution for a qualifying project shall be at least 20% of the total cost of the demonstration project.

"Commence," as applied to construction of a major stationary source or major modification, means that the owner has all necessary preconstruction approvals or permits and either has:

- a. Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
- b. Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner, to undertake a program of actual construction of the source, to be completed within a reasonable time.

"Complete application" means that the application contains all the information necessary for processing the application and the provisions of § 10.1-1321.1 of the Virginia Air Pollution Control Law have been met. Designating an application complete for purposes of permit processing does not preclude the board from requesting or accepting additional information.

"Construction" means any physical change in or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in actual emissions.

"Continuous emissions monitoring system—~~(CEMS)~~" or "CEMS" means all of the equipment that may be required to meet the data acquisition and availability requirements of this article, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

"Continuous emissions rate monitoring system—~~(CERMS)~~" or "CERMS" means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

"Continuous parameter monitoring system—~~(CPMS)~~" or "CPMS" means all of the equipment necessary to meet the data acquisition and availability requirements of this article, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and to record average operational parameter values on a continuous basis.

"Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of

supplying more than one-third of its potential electric output capacity and more than 25 megawatt electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

"Emissions cap" means any limitation on the rate of emissions of any air pollutant from one or more emissions units established and identified as an emissions cap in any permit issued pursuant to the new source review program or operating permit program.

"Emissions unit" means any part of a stationary source ~~which~~ that emits or would have the potential to emit any regulated NSR pollutant and includes an electric steam generating unit. For purposes of this article, there are two types of emissions units: (i) a new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than two years from the date such emissions unit first operated; and (ii) an existing emissions unit is any emissions unit that is not a new emissions unit. A replacement unit is an existing emissions unit.

"Enforceable as a practical matter" means that the permit contains emission limitations that are enforceable by the board or the department and meet the following criteria:

- a. Are permanent;
- b. Contain a legal obligation for the owner to adhere to the terms and conditions;
- c. Do not allow a relaxation of a requirement of the implementation plan;
- d. Are technically accurate and quantifiable;
- e. Include averaging times or other provisions that allow at least monthly (or a shorter period if necessary to be consistent with the implementation plan) checks on compliance. This may include, but not be limited to, the following: compliance with annual limits in a rolling basis, monthly or shorter limits, and other provisions consistent with this article and other regulations of the board; and
- f. Require a level of recordkeeping, reporting and monitoring sufficient to demonstrate compliance.

"Federal land manager" means, with respect to any lands in the United States, the secretary of the department with authority over such lands.

"Federally enforceable" means all limitations and conditions ~~which~~ that are enforceable by the administrator and citizens under the federal Clean Air Act or that are enforceable under other statutes administered by the administrator. Federally enforceable limitations and conditions include, but are not limited to the following:

- a. Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission

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limitations established pursuant to § 112 of the federal Clean Air Act as amended in 1990.

b. New source performance standards established pursuant to § 111 of the federal Clean Air Act, and emission standards established pursuant to § 112 of the federal Clean Air Act before it was amended in 1990.

c. All terms and conditions (unless expressly designated as not federally enforceable) in a federal operating permit, including any provisions that limit a source's potential to emit.

d. Limitations and conditions that are part of an implementation plan established pursuant to § 110, § 111(d), or § 129 of the federal Clean Air Act.

e. Limitations and conditions (unless expressly designated as not federally enforceable) that are part of a federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by EPA into the implementation plan.

f. Limitations and conditions (unless expressly designated as not federally enforceable) that are part of a state operating permit where the permit and the permit program pursuant to which it was issued meet all of the following criteria:

(1) The operating permit program has been approved by the EPA into the implementation plan under § 110 of the federal Clean Air Act.

(2) The operating permit program imposes a legal obligation that operating permit holders adhere to the terms and limitations of such permits and provides that permits that do not conform to the operating permit program requirements and the requirements of EPA's underlying regulations may be deemed not "federally enforceable" by EPA.

(3) The operating permit program requires that all emission limitations, controls, and other requirements imposed by such permits will be at least as stringent as any other applicable limitations and requirements contained in the implementation plan or enforceable under the implementation plan, and that the program may not issue permits that waive, or make less stringent, any limitations or requirements contained in or issued pursuant to the implementation plan, or that are otherwise "federally enforceable."

(4) The limitations, controls, and requirements in the permit in question are permanent, quantifiable, and otherwise enforceable as a practical matter.

(5) The permit in question was issued only after adequate and timely notice and opportunity for comment by the EPA and the public.

g. Limitations and conditions in a regulation of the board or program that has been approved by EPA under subpart E of 40 CFR Part 63 for the purposes of implementing and enforcing § 112 of the federal Clean Air Act.

h. Individual consent agreements that EPA has legal authority to create.

"Federal operating permit" means a permit issued under the federal operating permit program.

"Federal operating permit program" means an operating permit system (i) for issuing terms and conditions for major stationary sources, (ii) established to implement the requirements of Title V of the federal Clean Air Act and associated regulations, and (iii) codified in Article 1 (9VAC5-80-50 et seq.), Article 2 (9VAC5-80-310 et seq.), Article 3 (9VAC5-80-360 et seq.), and Article 4 (9VAC5-80-710 et seq.) of this part.

"Fugitive emissions" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"Lowest achievable emissions rate—~~(LAER)~~" or "LAER" means for any source, the more stringent rate of emissions based on the following:

a. The most stringent emissions limitation ~~which that~~ is contained in the implementation plan of any state for such class or category of stationary source, unless the owner of the proposed stationary source demonstrates that such limitations are not achievable; or

b. The most stringent emissions limitation ~~which that~~ is achieved in practice by such class or category of stationary sources. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

"Major emissions unit" means (i) any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or (ii) any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant for nonattainment areas in subdivision a (1) of the definition of "major stationary source."

"Major modification"

a. Means any physical change in or change in the method of operation of a major stationary source that would result in (i) a significant emissions increase of a regulated NSR pollutant; and (ii) a significant net emissions increase of that pollutant from the source.

b. Any significant emissions increase from any emissions units or net emissions increase at a source that is considered significant for volatile organic compounds shall be considered significant for ozone.

c. A physical change in or change in the method of operation shall not include the following:

- (1) Routine maintenance, repair and replacement.
- (2) Use of an alternative fuel or raw material by reason of an order under § 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act.
- (3) Use of an alternative fuel by reason of an order or rule § 125 of the federal Clean Air Act.
- (4) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
- (5) Use of an alternative fuel or raw material by a stationary source that:
 - (a) The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally and state enforceable permit condition which was established after December 21, 1976, pursuant to 40 CFR 52.21 or this chapter; or
 - (b) The source is approved to use under any permit issued under 40 CFR 52.21 or this chapter.
- (6) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally and state enforceable permit condition which was established after December 21, 1976, pursuant to 40 CFR 52.21 or this chapter.
- (7) Any change in ownership at a stationary source.
- (8) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:
 - (a) The applicable implementation plan; and
 - (b) Other requirements necessary to attain and maintain the national ambient air quality standard during the project and after it is terminated.
- d. This definition shall not apply with respect to a particular regulated NSR pollutant when the source is complying with the requirements under 9VAC5-80-2144 for a PAL for that pollutant. Instead, the definition for "PAL major modification" shall apply.

"Major new source review (NSR) permit" means a permit issued under the major new source review program.

"Major new source review (major NSR) program" means a preconstruction review and permit program (i) for new major stationary sources or major modifications (physical changes or changes in the method of operation), (ii) established to implement the requirements of §§ 112, 165 and 173 of the federal Clean Air Act and associated regulations, and (iii) codified in Article 7 (9VAC5-80-1400 et seq.), Article 8 (9VAC5-80-1605 et seq.) and Article 9 (9VAC5-80-2000 et seq.) of this part.

"Major stationary source"

a. Means:

- (1) Any stationary source of air pollutants ~~which~~ that emits, or has the potential to emit, (i) 100 tons per year or more of a regulated NSR pollutant, (ii) 50 tons per year or more of volatile organic compounds or nitrogen oxides in ozone nonattainment areas classified as serious in 9VAC5-20-204, (iii) 25 tons per year or more of volatile organic compounds or nitrogen oxides in ozone nonattainment areas classified as severe in 9VAC5-20-204, or (iv) 100 tons per year or more of nitrogen oxides or 50 tons per year of volatile organic compounds in the Ozone Transport Region; or
- (2) Any physical change that would occur at a stationary source not qualifying under subdivision a (1) of this definition as a major stationary source, if the change would constitute a major stationary source by itself.
- b. A major stationary source that is major for volatile organic compounds shall be considered major for ozone.
- c. The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this article whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:
 - (1) Coal cleaning plants (with thermal dryers).
 - (2) Kraft pulp mills.
 - (3) Portland cement plants.
 - (4) Primary zinc smelters.
 - (5) Iron and steel mills.
 - (6) Primary aluminum ore reduction plants.
 - (7) Primary copper smelters.
 - (8) Municipal incinerators (or combinations of them) capable of charging more than 250 tons of refuse per day.
 - (9) Hydrofluoric acid plants.
 - (10) Sulfuric acid plants.
 - (11) Nitric acid plants.
 - (12) Petroleum refineries.
 - (13) Lime plants.
 - (14) Phosphate rock processing plants.
 - (15) Coke oven batteries.
 - (16) Sulfur recovery plants.
 - (17) Carbon black plants (furnace process).
 - (18) Primary lead smelters.
 - (19) Fuel conversion plants.
 - (20) Sintering plants.
 - (21) Secondary metal production plants.
 - (22) Chemical process plants (which shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140).

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(23) Fossil-fuel boilers (or combination of them) totaling more than 250 million British thermal units per hour heat input.

(24) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.

(25) Taconite ore processing plants.

(26) Glass fiber manufacturing plants.

(27) Charcoal production plants.

(28) Fossil fuel steam electric plants of more than 250 million British thermal units per hour heat input.

(29) Any other stationary source category, which, as of August 7, 1980, is being regulated under 40 CFR Part 60, 61 or 63.

"Minor new source review (NSR) permit" means a permit issued under the minor new source review program.

"Minor new source review (minor NSR) program" means a preconstruction review and permit program (i) for new stationary sources or modifications (physical changes or changes in the method of operation) that are not subject to review under the major new source review program, (ii) established to implement the requirements of §§ 110(a)(2)(C) and 112 of the federal Clean Air Act and associated regulations, and (iii) codified in Article 6 (9VAC5-80-1100 et seq.) of this part.

"Necessary preconstruction approvals or permits" means those permits required under the NSR program that are part of the applicable implementation plan.

"Net emissions increase" means:

a. ~~Means, with~~ With respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:

(1) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to 9VAC5-80-2000 H; and

(2) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this subdivision shall be determined as provided in the definition of "baseline actual emissions," except that subdivisions a (3) and b (4) of that definition shall not apply.

b. An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs before the date that the increase from the particular change occurs. For sources located in ozone nonattainment areas classified as serious or severe in 9VAC5-20-204, an increase or decrease in actual emissions of volatile organic compounds or nitrogen oxides is contemporaneous with the increase from the particular change only if it occurs during a period of five

consecutive calendar years which includes the calendar year in which the increase from the particular change occurs.

c. An increase or decrease in actual emissions is creditable only if:

(1) It occurs between the date five years before construction on the particular change commences and the date that the increase from the particular change occurs; and

(2) The board has not relied on it in issuing a permit for the source pursuant to this article which permit is in effect when the increase in actual emissions from the particular change occurs.

d. An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

e. A decrease in actual emissions is creditable only to the extent that:

(1) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(2) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins;

(3) The board has not relied on it in issuing any permit pursuant to this chapter or the board has not relied on it in demonstrating attainment or reasonable further progress in the implementation plan; and

(4) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

f. An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

g. Subdivision a of the definition of "actual emissions" shall not apply for determining creditable increases and decreases or after a change.

"New source performance standard" or "NSPS" means the U.S. Environmental Protection Agency Regulations on Standards of Performance for New Stationary Sources, as promulgated in 40 CFR Part 60 and designated in 9VAC5-50-410.

"New source review (NSR) permit" means a permit issued under the new source review program.

"New source review (NSR) program" means a preconstruction review and permit program (i) for new stationary sources or modifications (physical changes or changes in the method of operation); (ii) established to implement the requirements of §§ 110(a)(2)(C), 112 (relating

to permits for hazardous air pollutants), 165 (relating to permits in prevention of significant deterioration areas), and 173 (relating to permits in nonattainment areas) of the federal Clean Air Act and associated regulations; and (iii) codified in Article 6 (9VAC5-80-1100 et seq.), Article 7 (9VAC5-80-1400 et seq.), Article 8 (9VAC5-80-1605 et seq.) and Article 9 (9VAC5-80-2000 et seq.) of this part.

"Nonattainment major new source review (NSR) program" means a preconstruction review and permit program (i) for new major stationary sources or major modifications (physical changes or changes in the method of operation), (ii) established to implement the requirements of § 173 of the federal Clean Air Act and associated regulations, and (iii) codified in Article 9 (9VAC5-80-2000 et seq.) of this part. Any permit issued under such a program is a major NSR permit.

"Nonattainment pollutant" means, within a nonattainment area, the pollutant for which such area is designated nonattainment. For ozone nonattainment areas, the nonattainment pollutants shall be volatile organic compounds (including hydrocarbons) and nitrogen oxides.

"Ozone transport region" means the area established by § 184(a) of the federal Clean Air Act or any other area established by the administrator pursuant to § 176A of the federal Clean Air Act for purposes of ozone. For the purposes of this article, the Ozone Transport Region consists of the following localities: Arlington County, Fairfax County, Loudoun County, Prince William County, Stafford County, Alexandria City, Fairfax City, Falls Church City, Manassas City, and Manassas Park City.

"Plantwide applicability limitation—~~(PAL)~~" or "PAL" means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established sourcewide in accordance with 9VAC5-80-2144.

"PAL effective date" generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

"PAL effective period" means the period beginning with the PAL effective date and ending ~~five~~ 10 years later.

"PAL major modification" means, notwithstanding the definitions for "major modification" and "net emissions increase," any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

"PAL permit" means the state operating permit issued by the board that establishes a PAL for a major stationary source.

"PAL pollutant" means the pollutant for which a PAL is established at a major stationary source.

"Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and

operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment, and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally and state enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source. For the purposes of actuals PALs, any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment, and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable or enforceable as a practical matter by the state.

"Predictive emissions monitoring system—~~(PEMS)~~" or "PEMS" means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and calculate and record the mass emissions rate (for example, pounds per hour) on a continuous basis.

"Prevention of significant deterioration (PSD) program" means a preconstruction review and permit program (i) for new major stationary sources or major modifications (physical changes or changes in the method of operation), (ii) established to implement the requirements of § 165 of the federal Clean Air Act and associated regulations, and (iii) codified in Article 8 (9VAC5-80-1605 et seq.) of this part.

"Project" means a physical change in; or change in the method of operation of; an existing major stationary source.

"Projected actual emissions" means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the five years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit of that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the source. In determining the projected actual emissions before beginning actual construction, the owner shall:

- a. Consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities, and compliance plans under the approved plan;
- b. Include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions; and

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c. Exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have emitted during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project, including any increased utilization due to product demand growth, provided such exclusion shall not reduce any calculated increases in emissions that are caused by, result from, or are related to the particular project; or

d. In lieu of using the method set out in subdivisions a through, b, and c of this definition, may elect to use the emissions unit's potential to emit, in tons per year, as defined under the definition of "potential to emit."

"Public comment period" means a time during which the public shall have the opportunity to comment on the new or modified source permit application information (exclusive of confidential information), the preliminary review and analysis of the effect of the source upon the ambient air quality, and the preliminary decision of the board regarding the permit application.

"Reasonable further progress" means the annual incremental reductions in emissions of a given air pollutant (including substantial reductions in the early years following approval or promulgation of an implementation plan and regular reductions thereafter) which are sufficient in the judgment of the board to provide for attainment of the applicable ambient air quality standard within a specified nonattainment area by the attainment date prescribed in the implementation plan for such area.

"Reasonably available control technology" or "RACT" means the lowest emission limit that a particular source is capable of meeting by the application of control technology that is reasonably available, considering technological and economic feasibility.

"Regulated NSR pollutant" means any of the following:

- a. Nitrogen oxides or any volatile organic compound.
- b. Any pollutant for which an ambient air quality standard has been promulgated.
- c. Any pollutant that is identified under this subdivision as a constituent or precursor of a general pollutant listed under subdivisions a or b of this definition, provided that such constituent or precursor pollutant may only be regulated under this article as part of regulation of the general pollutant. Precursors identified for purposes of this article shall be the following:

- (1) Volatile organic compounds and nitrogen oxides are precursors to ozone in all ozone nonattainment areas.
- (2) Sulfur dioxide is a precursor to PM_{2.5} in all PM_{2.5} nonattainment areas.
- (3) Nitrogen oxides are presumed to be precursors to PM_{2.5} in all PM_{2.5} nonattainment areas, unless the board determines that emissions of nitrogen oxides from

sources in a specific area are not a significant contributor to that area's ambient PM_{2.5} concentrations.

(4) Volatile organic compounds and ammonia are presumed not to be precursors to PM_{2.5} in any PM_{2.5} nonattainment area, unless the board determines that emissions of volatile organic compounds or ammonia from sources in a specific area are a significant contributor to that area's ambient PM_{2.5} concentrations.

d. PM_{2.5} emissions and PM₁₀ emissions shall include gaseous emissions from a source or activity that condense to form particulate matter at ambient temperatures. On or after January 1, 2011, such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM_{2.5} and PM₁₀ in permits issued under this article. Compliance with emissions limitations for PM_{2.5} and PM₁₀ issued prior to this date shall not be based on condensable particulate matter unless required by the terms and conditions of the permit. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this article.

"Replacement unit" means an emissions unit for which all the following criteria are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

- a. The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit.
- b. The emissions unit is identical to or functionally equivalent to the replaced emissions unit.
- c. The replacement does not alter the basic design parameters of the process unit.
- d. The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

"Secondary emissions" means emissions ~~which~~ that would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this article, secondary emissions shall be specific, well defined, quantifiable, and affect the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any off-site support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions ~~which~~ that come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

"Significant" means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

a. Ozone nonattainment areas classified as serious or severe in 9VAC5-20-204.

| POLLUTANT | EMISSIONS RATE |
|-------------------|--|
| Carbon Monoxide | 100 tons per year (tpy) |
| Nitrogen Oxides | 25 tpy |
| Sulfur Dioxide | 40 tpy |
| PM ₁₀ | 15 tpy |
| PM _{2.5} | 10 tpy of direct PM _{2.5} emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions unless demonstrated not to be a PM _{2.5} precursor under the definition of "regulated NSR pollutant" |
| Ozone | 25 tpy of volatile organic compounds |
| Lead | 0.6 tpy |

b. Other nonattainment areas.

| POLLUTANT | EMISSIONS RATE |
|-------------------|--|
| Carbon Monoxide | 100 tons per year (tpy) |
| Nitrogen Oxides | 40 tpy |
| Sulfur Dioxide | 40 tpy |
| PM ₁₀ | 15 tpy |
| PM _{2.5} | 10 tpy of direct PM _{2.5} emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions unless demonstrated not to be a PM _{2.5} precursor under the definition of "regulated NSR pollutant" |
| Ozone | 40 tpy of volatile organic compounds |
| Lead | 0.6 tpy |

"Significant emissions increase" means, for a regulated NSR pollutant, an increase in emissions that is significant for that pollutant.

"Significant emissions unit" means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit.

"Small emissions unit" means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant.

"State enforceable" means all limitations and conditions that are enforceable as a practical matter, including any regulation of the board, those requirements developed pursuant to 9VAC5-170-160, requirements within any applicable order or variance, and any permit requirements established pursuant to this chapter.

"State operating permit" means a permit issued under the state operating permit program.

"State operating permit program" means an operating permit program (i) for issuing limitations and conditions for stationary sources, (ii) promulgated to meet the EPA's minimum criteria for federal enforceability, including adequate notice and opportunity for the EPA and public comment prior to issuance of the final permit, and practicable enforceability, and (iii) codified in Article 5 (9VAC5-80-800 et seq.) of this part.

"Stationary source" means any building, structure, facility, or installation ~~which~~ that emits or may emit a regulated NSR pollutant.

"Synthetic minor" means a stationary source whose potential to emit is constrained by state-enforceable and federally enforceable limits, so as to place that stationary source below the threshold at which it would be subject to permit or other requirements governing major stationary sources in regulations of the board or in the federal Clean Air Act.

"Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of five years or less, and that complies with the applicable implementation plan and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

9VAC5-80-2144. Actuals plantwide applicability limits (PALs)

A. The board may approve the use of an actuals PAL for any existing major stationary source (except as provided in subdivision 1 of this subsection) if the PAL meets the requirements of this section. The term "PAL" shall mean "actuals PAL" throughout this section.

1. No PAL shall be allowed for VOC or NO_x for any source located in an extreme ozone nonattainment area.

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2. Any physical change in or change in the method of operation of a source that maintains its total sourcewide emissions below the PAL level, meets the requirements of this section, and complies with the PAL permit:

- a. Is not a major modification for the PAL pollutant;
- b. Does not have to be approved through this article; and
- c. Is not subject to the provisions in 9VAC5-80-2000 D (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program).

3. Except as provided under subdivision 2 c of this subsection, a source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

B. As part of a permit application requesting a PAL, the owner of a major stationary source shall submit the following information to the board for approval:

1. A list of all emissions units at the source designated as small, significant, or major based on their potential to emit. In addition, the owner shall indicate which, if any, federal or state applicable requirements, emission limitations, or work practices apply to each unit.

2. Calculations of the baseline actual emissions, with supporting documentation. Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.

3. The calculation procedures that the owner proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by subdivision N 1 of this section.

C. The general requirements set forth in this subsection shall apply to the establishment of PALs.

1. The board may establish a PAL at a major stationary source, provided that at a minimum, the following requirements are met:

- a. The PAL shall impose an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the owner shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month rolling average). For each month during the first 11 months from the PAL effective date, the owner shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

b. The PAL shall be established in a PAL permit that meets the public participation requirements in subsection D of this section.

c. The PAL permit shall contain all the requirements of subsection F of this section.

d. The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant.

e. Each PAL shall regulate emissions of only one pollutant.

f. Each PAL shall have a PAL effective period of ~~five~~ 10 years.

g. The owner shall comply with the monitoring, recordkeeping, and reporting requirements provided in subsections ~~M through N~~, through N, and O of this section for each emissions unit under the PAL through the PAL effective period.

2. At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant, which occur during the PAL effective period, creditable as decreases for purposes of offsets under 9VAC5-80-2120 F through N unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

D. PALs for existing major stationary sources shall be established, renewed, or increased through the public participation procedures prescribed in the applicable permit programs identified in the definition of PAL permit. In no case may the board issue a PAL permit unless the board provides the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The board will address all material comments before taking final action on the permit.

E. The actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant or under the federal Clean Air Act, whichever is lower. When establishing the actuals PAL level, for a PAL pollutant, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all existing emissions units. ~~The same consecutive 24-month period shall be used for each different PAL pollutant unless the owner can demonstrate to the satisfaction of the board that a different consecutive 24-month period for a different pollutant or pollutants is more appropriate due to extenuating circumstances.~~ However, a different consecutive 24-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shutdown after this 24-month period shall be subtracted from the PAL level. Emissions from units on which actual construction began after the 24-month period shall be added to the PAL level in an amount equal to the potential to emit of

the units. The board will specify a reduced PAL level (in tons per year) in the PAL permit to become effective on the future compliance dates of any applicable federal or state regulatory requirements that the board is aware of prior to issuance of the PAL permit. For instance, if the source owner will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO_x to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such units.

F. The PAL permit shall contain, at a minimum, the following information:

1. The PAL pollutant and the applicable sourcewide emission limitation in tons per year.
2. The PAL permit effective date and the expiration date of the PAL (PAL effective period).
3. Specification in the PAL permit that if an owner applies to renew a PAL in accordance with subsection J of this section before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the board, or until the board determines that the revised PAL permit will not be issued.
4. A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns and malfunctions.
5. A requirement that, once the PAL expires, the source is subject to the requirements of subsection I of this section.
6. The calculation procedures that the owner shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by subdivision N 1 of this section.
7. A requirement that the owner monitor all emissions units in accordance with the provisions under subsection M of this section.
8. A requirement to retain the records required under subsection N of this section on site. Such records may be retained in an electronic format.
9. A requirement to submit the reports required under subsection O of this section by the required deadlines.
10. Any other requirements that the board deems necessary to implement and enforce the PAL.

G. The PAL effective period shall be ~~five~~ 10 years.

H. The requirements for reopening of a PAL permit set forth in this section shall apply to actuals PALs.

1. During the PAL effective period, the board will reopen the PAL permit to:
 - a. Correct typographical and calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;

- b. Reduce the PAL if the owner creates creditable emissions reductions for use as offsets under 9VAC5-80-2120 F through N; and
- c. Revise the PAL to reflect an increase in the PAL as provided under subsection L of this section.

2. The board may reopen the PAL permit for any of the following reasons:

- a. Reduce the PAL to reflect newly applicable federal requirements (e.g., NSPS) with compliance dates after the PAL effective date.
- b. Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the board may impose on the major stationary source.
- c. Reduce the PAL if the board determines that a reduction is necessary to avoid causing or contributing to a violation of an ambient air quality standard or ambient air increment in 9VAC5-80-1635, or to an adverse impact on an air quality related value that has been identified for a federal class I area by a federal land manager and for which information is available to the general public.

3. Except for the permit reopening in subdivision 1 a of this subsection for the correction of typographical and calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of subsection D of this section.

I. Any PAL which is not renewed in accordance with the procedures in subsection J of this section shall expire at the end of the PAL effective period, and the following requirements shall apply:

1. Each emissions unit or each group of emissions units that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the following procedures:

- a. Within the timeframe specified for PAL renewals in subdivision J 2 of this section, the source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the board) by distributing the PAL allowable emissions for the source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under ~~subsection J 5~~ subdivision K 4 of this section, such distribution shall be made as if the PAL had been adjusted.

b. The board will decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the board determines is appropriate.

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2. Each emissions unit shall comply with the allowable emission limitation on a 12-month rolling basis. The board may approve the use of monitoring systems (such as source testing or emission factors) other than CEMS, CERMS, PEMS or CPMS to demonstrate compliance with the allowable emission limitation.

3. Until the board issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under subdivision 1 b of this subsection, the source shall continue to comply with a sourcewide, multiunit emissions cap equivalent to the level of the PAL emission limitation.

4. Any physical change or change in the method of operation at the source will be subject to the nonattainment major NSR requirements if such change meets the definition of "major modification."

5. The owner shall continue to comply with any state or federal applicable requirements (such as BACT, RACT, or NSPS) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to 9VAC5-80-2000 D, but were eliminated by the PAL in accordance with the provisions in subdivision A 2 c of this section.

J. The requirements for the renewal of the PAL permit set forth in this subsection shall apply to actuals PALs.

1. The board will follow the procedures specified in subsection D of this section in approving any request to renew a PAL, and will provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the board.

2. The owner shall submit a timely application to the board to request renewal of a PAL. A timely application is one that is submitted at least six months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued, or until the board determines that the revised permit with the renewed PAL will not be issued, and a permit is issued pursuant to subsection I of this section.

3. The application to renew a PAL permit shall contain the following information:

- a. The information required in subsection B of this section.
- b. A proposed PAL level.
- c. The sum of the potential to emit of all emissions units under the PAL, with supporting documentation.

d. Any other information the owner wishes the board to consider in determining the appropriate level for renewing the PAL.

K. The requirements for the adjustment of the PAL set forth in this subsection shall apply to actuals PALs. In determining whether and how to adjust the PAL, the board will consider the options outlined in subdivisions 1 and 2 of this subsection. However, in no case may any such adjustment fail to comply with subdivision 3 of this subsection.

1. If the emissions level calculated in accordance with subsection E of this section is equal to or greater than 80% of the PAL level, the board may renew the PAL at the same level without considering the factors set forth in subdivision 2 of this subsection; or

2. The board may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the board in its written rationale.

3. Notwithstanding subdivisions 1 and 2 of this subsection:

a. If the potential to emit of the source is less than the PAL, the board will adjust the PAL to a level no greater than the potential to emit of the source; and

b. The board will not approve a renewed PAL level higher than the current PAL, unless the source has complied with the provisions for increasing a PAL under subsection L of this section.

4. If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if the board has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or federal operating permit renewal, whichever occurs first.

L. The requirements for increasing a PAL during the PAL effective period set forth in this subsection shall apply to actuals PALs.

1. The board may increase a PAL emission limitation only if the owner of the major stationary source complies with the following provisions:

a. The owner shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions units contributing to the increase in emissions so as to cause the source's emissions to equal or exceed its PAL.

b. As part of this application, the owner shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls,

plus the sum of the allowable emissions of the new or modified emissions units exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding ~~five~~ 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit shall currently comply.

c. The owner obtains a major NSR permit for all emissions units identified in subdivision 1 a of this subsection, regardless of the magnitude of the emissions increase resulting from them (i.e., no significant levels apply). These emissions units shall comply with any emissions requirements resulting from the nonattainment major NSR program process (e.g., LAER), even though they have also become subject to the PAL or continue to be subject to the PAL.

2. The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

3. The board will calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT equivalent controls as determined in accordance with subdivision 1 b of this subsection), plus the sum of the baseline actual emissions of the small emissions units.

4. The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of subsection D of this section.

M. The requirements for monitoring the PAL set forth in this subsection apply to actuals PALs.

1. The general requirements for monitoring a PAL set forth in this subdivision apply to actuals PALs.

a. Each PAL permit shall contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit shall be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system shall meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

b. The PAL monitoring system shall employ one or more of the four general monitoring approaches meeting the

minimum requirements set forth in subdivision 2 of this subsection and must be approved by the board.

c. Notwithstanding subdivision 1 b of this subsection, the owner may also employ an alternative monitoring approach that meets subdivision 1 a of this subsection if approved by the board.

d. Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.

2. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in subdivisions 3 through 9 of this subsection:

a. Mass balance calculations for activities using coatings or solvents;

b. CEMS;

c. CPMS or PEMS; and

d. Emission factors.

3. An owner using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

a. Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;

b. Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and

c. Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner shall use the highest value of the range to calculate the PAL pollutant emissions unless the board determines there is site-specific data or a site-specific monitoring program to support another content within the range.

4. An owner using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

a. CEMS shall comply with applicable performance specifications found in 40 CFR Part 60, appendix B; and

b. CEMS shall sample, analyze, and record data at least every 15 minutes while the emissions unit is operating.

5. An owner using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

a. The CPMS or the PEMS shall be based on current site-specific data demonstrating a correlation between the monitored parameters and the PAL pollutant emissions across the range of operation of the emissions unit; and

b. Each CPMS or PEMS shall sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the board, while the emissions unit is operating.

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6. An owner using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

- a. All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;
- b. The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and
- c. If technically practicable, the owner of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within six months of PAL permit issuance, unless the board determines that testing is not required.

7. The owner shall record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.

8. Notwithstanding the requirements in subdivisions 3 through 7 of this subsection, where an owner of an emissions unit cannot demonstrate a correlation between the monitored parameters and the PAL pollutant emissions rate at all operating points of the emissions unit, the board will, at the time of permit issuance:

- a. Establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating points; or
- b. Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameters and the PAL pollutant emissions is a violation of the PAL.

9. All data used to establish the PAL pollutant shall be revalidated through performance testing or other scientifically valid means approved by the board. Such testing shall occur at least once every five years after issuance of the PAL.

N. The requirements for recordkeeping in the PAL permit set forth in this subsection shall apply to actuals PALs.

1. The PAL permit shall require the owner to retain a copy of all records necessary to determine compliance with any requirement of this section and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for five years from the date of such record.

2. The PAL permit shall require an owner to retain a copy of the following records for the duration of the PAL effective period plus five years:

- a. A copy of the PAL permit application and any applications for revisions to the PAL; and
- b. Each annual certification of compliance pursuant to the federal operating permit and the data relied on in certifying the compliance.

O. The owner shall submit semi-annual monitoring reports and prompt deviation reports to the board in accordance with the federal operating permit program. The reports shall meet the following requirements:

1. The semi-annual report shall be submitted to the board within 30 days of the end of each reporting period. This report shall contain the following information:

- a. Identification of the owner and the permit number.
- b. Total annual emissions in tons per year based on a 12-month rolling total for each month in the reporting period recorded pursuant to subdivision N 1 of this section.
- c. All data relied upon, including, but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions.
- d. A list of any emissions units modified or added to the source during the preceding six-month period.
- e. The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
- f. A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by subdivision M 7 of this section.
- g. A signed statement by the responsible official (as defined by the federal operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

2. The owner shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to 9VAC5-80-110 F 2 b shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by 9VAC5-80-110 F 2 b. The reports shall contain the following information:

- a. Identification of the owner and the permit number;
- b. The PAL requirement that experienced the deviation or that was exceeded;
- c. Emissions resulting from the deviation or the exceedance; and
- d. A signed statement by the responsible official (as defined by the federal operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

3. The owner shall submit to the board the results of any revalidation test or method within three months after completion of such test or method.

P. The board will not issue a PAL that does not comply with the requirements of this section after September 1, 2006. The board may supersede any PAL that was established prior to September 1, 2006, with a PAL that complies with the requirements of this section.

9VAC5-85-50. Definitions.

A. For the purpose of applying this part in the context of the Regulations for the Control and Abatement of Air Pollution and related uses, the words or terms shall have the meanings given them in 9VAC5-80-1615 (Definitions), except for the terms defined in subsection C of this section.

B. Unless otherwise required by context, all terms not defined herein shall have the meanings given them in 9VAC5-10 (General Definitions) or 9VAC5-80-5 (Definitions), or commonly ascribed to them by recognized authorities, in that order of priority.

C. Terms defined.

"Actuals PAL" means (i) for major stationary sources, a PAL based on the baseline actual emissions of all emissions units at the source that emit or have the potential to emit the PAL pollutant or (ii) for GHG-only sources, a PAL based on the baseline actual emissions of all emissions units at the source, that emit or have the potential to emit GHGs.

"Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits that restrict the operating rate or hours of operation, or both) and the most stringent of the following:

1. The allowable emissions for any emissions unit as calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit; or
2. An emissions unit's potential to emit.

"Baseline actual emissions for a GHG PAL" means the average rate, in tons per year CO₂e or tons per year GHG, as applicable, at which the emissions unit actually emitted GHGs during any consecutive 24-month period selected by the owner within the ~~five-year~~ 10-year period immediately preceding either the date the owner begins actual construction of the project or the date a complete permit application is received by the board for a permit required under this part. For any existing electric utility steam generating unit, baseline actual emissions for a GHG PAL means the average rate, in tons per year CO₂e or tons per year GHG, as applicable, at which the emissions unit actually emitted the GHGs during any consecutive 24-month period selected by the owner within the five-year period immediately preceding the date the owner begins actual construction of the project. ~~The~~, except that the board will allow the use of a different

time period upon a determination that it is more representative of normal source operation.

1. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

2. The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

3. The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the stationary source shall currently comply, had such stationary source been required to comply with such limitations during the consecutive 24-month period.

4. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual GHG emissions and for adjusting this amount if required by subdivisions 2 and 3 of this definition.

~~5. When a project involves multiple emissions units, only one consecutive 24 month period shall be used to determine the baseline actual emissions.~~

"Emissions unit" means any part of a stationary source that emits or has the potential to emit GHGs. For purposes of 9VAC5-85-55, there are two types of emissions units: (i) a new emissions unit is any emissions unit that is or will be newly constructed and that has existed for less than two years from the date such emissions unit first operated, and (ii) an existing emissions unit is any emissions unit that does not meet the definition of a new emissions unit. A replacement unit is an existing emissions unit.

"GHG-only source" means any existing stationary source that emits or has the potential to emit GHGs in the amount equal to or greater than the amount of GHGs on a mass basis that would be sufficient for a new source to trigger permitting requirements for GHGs under the definition of "major stationary source" and the amount of GHGs on a CO₂e basis that would be sufficient for a new source to trigger permitting requirements for GHGs under the definition of "subject to regulation" at the time the PAL permit is being issued, but does not emit or have the potential to emit any other non-GHG regulated NSR pollutant at or above the applicable major source threshold. A GHG-only source may only obtain a PAL for GHG emissions under 9VAC5-85-55.

"Greenhouse gases—(GHGs)" or "GHGs" means the aggregate group of six greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

"Major emissions unit" means (i) for any major stationary source obtaining a GHG PAL issued on a mass basis, a major emissions unit as defined in 9VAC5-80-1615 C or (ii) for a

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GHG PAL issued on a CO₂e basis, any emissions unit that emits or has the potential to emit equal to or greater than the amount of GHGs on a CO₂e basis that would be sufficient for a new source to trigger permitting requirements under the definition of "subject to regulation" at the time the PAL permit is being issued.

"Major stationary source" means a major stationary source that is defined in and subject to Article 8 (9VAC5-80-1605 et seq.) of 9VAC5-80 (Permits for Stationary Sources) and that meets the definition of "subject to regulation."

"Minor source" means any stationary source that does not meet either (i) the definition of "major stationary source" for any pollutant at the time the PAL is issued or (ii) the definition of "subject to regulation."

"Plantwide applicability limitation" or "PAL" means an emission limitation expressed on a mass basis in tons per year, or expressed in tons per year CO₂e for a CO₂e-based GHG emission limitation, for a pollutant at a major stationary source or GHG-only source, that is enforceable as a practical matter and established ~~source wide~~ sourcewide in accordance with 9VAC5-85-55.

"PAL effective date" generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

"PAL effective period" means the period beginning with the PAL effective date and ending ~~five~~ 10 years later.

"PAL major modification" means, notwithstanding the definitions for "major modification" and "net emissions increase" as defined in 9VAC5-80-1615 C and the definition of "subject to regulation" of this section, any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

"PAL permit" means the major NSR permit, the state operating permit, or the federal operating permit that establishes a PAL for a major stationary source or a GHG-only source.

"PAL pollutant" means the pollutant for which a PAL is established at a major stationary source or a GHG-only source. For a GHG-only source, the only available PAL pollutant is greenhouse gases.

"Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable or enforceable as a practical matter. Secondary emissions do not count in determining the potential to emit of

a stationary source. For the purposes of actuals PALs, any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment, and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable or enforceable as a practical matter by the state.

"Regulated NSR pollutant" means:

1. Any pollutant for which an ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the administrator (e.g., volatile organic compounds and NO_x are precursors for ozone);
2. Any pollutant that is subject to any standard promulgated under § 111 of the federal Clean Air Act;
3. Any class I or II substance subject to a standard promulgated under or established by Title VI of the federal Clean Air Act; or
4. Any pollutant that otherwise is subject to regulation under the federal Clean Air Act as defined in the definition of "subject to regulation."
5. Notwithstanding subdivisions 1 through 4 of this definition, the term "regulated NSR pollutant" shall not include any or all hazardous air pollutants either listed in § 112 of the federal Clean Air Act, or added to the list pursuant to § 112(b)(2) of the federal Clean Air Act, and which have not been delisted pursuant to § 112(b)(3) of the federal Clean Air Act, unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under § 108 of the federal Clean Air Act.

"Replacement unit" means an emissions unit for which all the following criteria are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

1. The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit.
2. The emissions unit is identical to or functionally equivalent to the replaced emissions unit.
3. The replacement does not change the basic design parameters of the process unit.
4. The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

"Significant emissions unit" means (i) for a GHG PAL issued on a mass basis, an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to

or greater than the significant level for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit or (ii) for a GHG PAL issued on a CO₂e basis, any emissions unit that emits or has the potential to emit GHGs on a CO₂e basis in amounts equal to or greater than the amount that would qualify the unit as small emissions unit, but less than the amount that would qualify the unit as a major emissions unit.

"Small emissions unit" means (i) for a GHG PAL issued on a mass basis, an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in this section or in the federal Clean Air Act, whichever is lower or (ii) for a GHG PAL issued on a CO₂e basis, an emissions unit that emits or has the potential to emit less than the amount of GHGs on a CO₂e basis defined as "significant" for the purposes of subdivision 3 of the definition of "subject to regulation" at the time the PAL permit is being issued.

"Subject to regulation" means, for any air pollutant, that the pollutant is subject to either a provision in the federal Clean Air Act, or a nationally applicable regulation codified by the administrator in Subchapter C of 40 CFR Chapter I, that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity. The following exceptions shall apply:

1. GHGs shall not be subject to regulation except as provided in subdivisions 4 and 5 of this definition and shall not be subject to regulation if the stationary source maintains its total ~~source-wide~~ sourcewide emissions below the GHG PAL level, meets the requirements of ~~9VAC5-95-55~~ 9VAC5-85-55, and complies with the PAL permit containing the GHG PAL. A GHG-only source with a valid CO₂e-based GHG PAL shall be considered to be a minor source for GHG.

2. For purposes of subdivisions 3 ~~through, 4, and~~ 5 of this definition, the term "tpy CO₂ equivalent emissions (CO₂e)" shall represent an amount of GHGs emitted, and shall be computed as follows:

a. Multiplying the mass amount of emissions (tpy), for each of the six greenhouse gases in the pollutant GHGs, by the gas's associated global warming potential published at Table A-1 to Subpart A of 40 CFR Part 98. For purposes of this subdivision, prior to July 21, 2014, the mass of the greenhouse gas carbon dioxide shall not include carbon dioxide emissions resulting from the combustion or decomposition of nonfossilized and biodegradable organic material originating from plants, animals, or micro-organisms (including products, byproducts, residues, and waste from agriculture, forestry, and related industries as well as the nonfossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and

liquids recovered from the decomposition of nonfossilized and biodegradable organic material).

b. Sum the resultant value from subdivision a of this subdivision for each gas to compute a tpy CO₂e.

3. The term "emissions increase" as used in subdivisions 4 and 5 of this definition shall mean that both a significant emissions increase (as calculated using the procedures in 9VAC5-80-1605 G) and a significant net emissions increase (as defined in 9VAC5-80-1615 C) occur. For the pollutant GHGs, an emissions increase shall be based on tpy CO₂e, and shall be calculated assuming the pollutant GHGs is a regulated NSR pollutant, and "significant" is defined as 75,000 tpy CO₂e instead of applying the value in subdivision b of the definition of "significant" in 9VAC5-80-1615 C.

4. Beginning January 2, 2011, the pollutant GHGs is subject to regulation if:

a. The stationary source is a new major stationary source for a regulated NSR pollutant that is not GHGs, and also will emit or will have the potential to emit 75,000 tpy CO₂e or more; or

b. The stationary source is an existing major stationary source for a regulated NSR pollutant that is not GHGs, and also will have an emissions increase of a regulated NSR pollutant, and an emissions increase of 75,000 tpy CO₂e or more.

5. Beginning July 1, 2011, in addition to the provisions in subdivision 4 of this definition, the pollutant GHGs shall also be subject to regulation:

a. At a new stationary source that will emit or have the potential to emit 100,000 tpy CO₂e; or

b. At an existing stationary source that emits or has the potential to emit 100,000 tpy CO₂e, when such stationary source undertakes a physical change or change in the method of operation that will result in an emissions increase of 75,000 tpy CO₂e or more.

9VAC5-85-55. Actuals plantwide applicability limits (PALs).

A. The following applicability requirements shall apply:

1. The board may approve the use of an actuals PAL for GHGs on either a mass basis or a CO₂e basis for any existing major stationary source or any existing GHG-only source if the PAL meets the requirements of this section. The term "PAL" shall mean "actuals PAL" throughout this section.

2. Any physical change in or change in the method of operation of a major stationary source or a GHG-only source that maintains its total ~~source-wide~~ sourcewide emissions below the PAL level, meets the requirements of this section, and complies with the PAL permit:

a. Is not a major modification for the PAL pollutant;

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b. Does not have to be approved through Article 8 (9VAC5-80-1605 et seq.) of Part II of 9VAC5-80 (Permits for Stationary Sources) or this part;

c. Is not subject to the provisions of 9VAC5-80-1605 C (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program); and

d. Does not make GHGs subject to regulation.

3. Except as provided under subdivision 2 c of this subsection, a major stationary source or a GHG-only source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

B. As part of a permit application requesting a PAL, the owner of a major stationary source or a GHG-only source shall submit the following information to the board for approval:

1. A list of all emissions units at the source designated as small, significant, or major based on their potential to emit. In addition, the owner of the source shall indicate which, if any, federal or state applicable requirements, emission limitations, or work practices apply to each unit.

2. Calculations of the baseline actual emissions, with supporting documentation. Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.

3. The calculation procedures that the owner proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by subdivision M 1 of this section.

4. As part of a permit application requesting a GHG PAL, the owner of a major stationary source or a GHG-only source shall submit a statement by the owner that clarifies whether the source is an existing major source as defined in the definition of "major stationary source" or a GHG-only source.

C. The board may establish a PAL at a major stationary source or a GHG-only source, provided that at a minimum, the following requirements are met. At no time during or after the PAL effective period are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under 9VAC5-80-2120 F through L unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

1. The PAL shall impose an annual emission limitation expressed on a mass basis in tons per year, or expressed in tons per year CO₂e, that is enforceable as a practical matter, for the entire major stationary source or GHG-only source. For each month during the PAL effective period

after the first 12 months of establishing a PAL, the major stationary source or GHG-only source owner shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source or GHG-only source owner shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

2. The PAL shall be established in a PAL permit that meets the public participation requirements in subsection D of this section.

3. The PAL permit shall contain all the requirements of subsection F of this section.

4. The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source or GHG-only source.

5. Each PAL shall regulate emissions of only one pollutant.

6. Each PAL shall have a PAL effective period of ~~five~~ 10 years.

7. The owner of the major stationary source or GHG-only source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in subsections L ~~through, M, and~~ N of this section for each emissions unit under the PAL through the PAL effective period.

D. PALs for existing major stationary sources or GHG-only sources shall be established, renewed, or increased through the public participation procedures prescribed in the applicable permit programs identified in the definition of "PAL permit." This includes the requirement that the board provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The board will address all material comments before taking final action on the permit.

E. Setting the ~~five-year~~ 10-year actuals PAL level shall be accomplished as follows:

1. Except as provided in subdivisions 2 and 3 of this subsection, the actuals PAL level on a mass basis for a major stationary source or a GHG-only source shall be established as the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source, plus an amount equal to the applicable significant level for the PAL pollutant under the definition of "significant" in 9VAC5-80-1615 C.

2. For newly constructed units, which do not include modifications to existing units, on which actual construction began after the 24-month period, in lieu of adding the baseline actual emissions as specified in subdivision 1 of this subsection, the emissions shall be

added to the PAL level in an amount equal to the potential to emit of the units.

3. For a CO₂e based GHG PAL, the actuals PAL level shall be established as the sum of the GHGs baseline actual emissions of GHGs for each emissions unit at the source, plus an amount equal to the amount defined as significant on a CO₂e basis for the purposes of subdivision 3 of the definition of "subject to regulation" at the time the PAL permit is being issued. When establishing the actuals PAL level for a CO₂e-based PAL, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all existing emissions units. Emissions associated with units that were permanently shut down after this 24-month period shall be subtracted from the PAL level. The board will specify a reduced PAL level (in tons per year CO₂e) in the PAL permit to become effective on the future compliance date of any applicable federal or state regulatory requirement that the board is aware of prior to issuance of the PAL permit.

F. The PAL permit shall contain, at a minimum, the following information:

1. The PAL pollutant and the applicable ~~source-wide~~ sourcewide emission limitation in tons per year CO₂e.
2. The PAL permit effective date and the expiration date of the PAL (PAL effective period).
3. Specification in the PAL permit that if a major stationary source or a GHG-only source owner applies to renew a PAL in accordance with subsection J of this section before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the board.
4. A requirement that emission calculations for compliance purposes shall include emissions from startups, shutdowns, and malfunctions.
5. A requirement that, once the PAL expires, the major stationary source or GHG-only source is subject to the requirements of subdivision I of this section.
6. The calculation procedures that the major stationary source or GHG-only source owner shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by subdivision M 1 of this section.
7. A requirement that the GHG-only source owner shall monitor all emissions units in accordance with the provisions under subsection L of this section.
8. A requirement to retain the records required under subsection M of this section on site. Such records may be retained in an electronic format.
9. A requirement to submit the reports required under subsection N of this section by the required deadlines.

10. Any other requirements that the board deems necessary to implement and enforce the PAL.

11. A permit for a GHG PAL issued to a GHG-only source shall also include a statement denoting that GHG emissions at the source will not be subject to regulation as long as the source complies with the PAL.

G. The PAL effective period shall be ~~five~~ 10 years.

H. The following requirements for reopening the PAL permit shall apply:

1. During the PAL effective period the board will reopen the PAL permit to:
 - a. Correct typographical or calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;
 - b. Reduce the PAL if the owner creates creditable emissions reductions for use as offsets under 9VAC5-80-2120 F through N; and
 - c. Revise the PAL to reflect an increase in the PAL as provided under subsection K of this section.
2. The board may reopen the PAL permit for the following reasons:
 - a. Reduce the PAL to reflect newly applicable federal requirements (for example, NSPS) with compliance dates after the PAL effective date; and
 - b. Reduce the PAL consistent with any other requirement that is enforceable as a practical matter and that the board may impose on the major stationary source or GHG-only source.
3. Except for the permit reopening in subdivision 1 a of this subsection for the correction of typographical or calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of subsection D of this section.

I. Any PAL that is not renewed in accordance with the procedures in subsection J of this section shall expire at the end of the PAL effective period, and the following requirements shall apply:

1. Each emissions unit or each group of emissions units that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the following procedures:
 - a. Within the time frame specified for PAL renewals in subdivision J 2 of this section, the major stationary source or GHG-only source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the board) by distributing the PAL allowable emissions for the major stationary source or GHG-only source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became

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effective during the PAL effective period, as required under subdivision J 5 of this section, such distribution shall be made as if the PAL had been adjusted.

b. The board will decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the board determines is appropriate.

2. Each emissions unit shall comply with the allowable emission limitation on a 12-month rolling basis. The board may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.

3. Until the board issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under subdivision 1 b of this subsection, the source shall continue to comply with a ~~source-wide~~ sourcewide, ~~multi-unit~~ multiunit emissions cap equivalent to the level of the PAL emission limitation.

4. Any physical change or change in the method of operation at the major stationary source or GHG-only source shall be subject to major NSR requirements if such change meets the definition of "major modification" in 9VAC5-80-1615 C.

5. The major stationary source or GHG-only source owner shall continue to comply with any state or federal applicable requirements (such as BACT, RACT, NSPS) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to 9VAC5-80-1605 C, but were eliminated by the PAL in accordance with the provisions in subdivision A 2 c of this section.

J. PALs shall be renewed as follows:

1. The board will follow the procedures specified in subsection D of this section in approving any request to renew a PAL for a major stationary source or a GHG-only source and will provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the board.

2. A major stationary source or a GHG-only source owner shall submit a timely application to the board to request renewal of a PAL. A timely application is one that is submitted at least six months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner of a major stationary source or a GHG-only source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be

effective until the revised permit with the renewed PAL is issued.

3. The application to renew a PAL permit shall contain the following information:

a. The information required in subdivisions B 1 ~~through~~, B 2, and B 3 of this section.

b. A proposed PAL level.

c. The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).

d. Any other information the owner wishes the board to consider in determining the appropriate level for renewing the PAL.

4. In determining whether and how to adjust the PAL, the board will consider the following options; however, in no case may any such adjustment fail to comply with subdivision 4 c of this subsection:

a. If the emissions level calculated in accordance with subsection E of this section is equal to or greater than 80% of the PAL level, the board may renew the PAL at the same level without considering the factors set forth in subdivision 4 b of this subsection; or

b. The board may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the board in its written rationale.

c. Notwithstanding subdivisions 4 a and 4 b of this subsection (i) if the potential to emit of the major stationary source or GHG-only source is less than the PAL, the board will adjust the PAL to a level no greater than the potential to emit of the source and (ii) the board will not approve a renewed PAL level higher than the current PAL, unless the major stationary source or GHG-only source has complied with the provisions of subsection ~~J~~ K of this section.

5. If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if the board has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or federal operating permit renewal, whichever occurs first.

K. A PAL may be increased during the PAL effective period as follows:

1. The board may increase a PAL emission limitation only if the major stationary source or GHG-only source complies with the following provisions:

a. The owner of the major stationary source or GHG-only source shall submit a complete application to request an increase in the PAL limit for a PAL major modification.

Such application shall identify the emissions units contributing to the increase in emissions so as to cause the GHG-only source's emissions to equal or exceed its PAL.

b. As part of this application, the major stationary source or GHG-only source owner shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions units exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit shall currently comply.

c. The owner obtains a major NSR permit for all emissions units identified in subdivision 1 a of this subsection, regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions units shall comply with any emissions requirements resulting from the major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.

2. The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

3. The board will calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT equivalent controls as determined in accordance with subdivision 1 b of this subsection), plus the sum of the baseline actual emissions of the small emissions units.

4. The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of subsection D of this section.

L. Monitoring requirements for PALs shall be as follows:

1. The following general requirements apply:

a. Each PAL permit shall contain enforceable requirements for the monitoring system that accurately ~~determines~~ determine plantwide emissions of the PAL pollutant in terms of CO₂e per unit of time. Any monitoring system authorized for use in the PAL permit

shall be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system shall meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

b. The PAL monitoring system shall employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in subdivision 2 of this subsection and shall be approved by the board.

c. Notwithstanding subdivision 1 b of this subsection, the owner may also employ an alternative monitoring approach that meets subdivision 1 a of this subsection if approved by the board.

d. Failure to use a monitoring system that meets the requirements of this subsection renders the PAL invalid.

2. The following are acceptable general monitoring approaches when conducted in accordance with the following minimum requirements:

a. Mass balance calculations for activities using coatings or solvents;

b. CEMS;

c. CPMS or PEMS; and

d. Emission factors.

3. An owner using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

a. Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;

b. Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and

c. Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner shall use the highest value of the range to calculate the PAL pollutant emissions unless the board determines there is site-specific data or a site-specific monitoring program to support another content within the range.

4. An owner using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

a. CEMS shall comply with applicable Performance Specifications found in Appendix B to 40 CFR Part 60; and

b. CEMS shall sample, analyze, and record data at least every 15 minutes while the emissions unit is operating.

5. An owner using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

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- a. The CPMS or the PEMS shall be based on current site-specific data demonstrating a correlation between the monitored parameters and the PAL pollutant emissions across the range of operation of the emissions unit; and
 - b. Each CPMS or PEMS shall sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the board, while the emissions unit is operating.
6. An owner using emission factors to monitor PAL pollutant emissions shall meet the following requirements:
- a. All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;
 - b. The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and
 - c. If technically practicable, the owner of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within six months of PAL permit issuance, unless the board determines that testing is not required.
7. A source owner shall record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.
8. Notwithstanding the requirements in subdivisions 3 through 7 of this subsection, where an owner of an emissions unit cannot demonstrate a correlation between the monitored parameters and the PAL pollutant emissions rate at all operating points of the emissions unit, the board will, at the time of permit issuance:
- a. Establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating points; or
 - b. Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameters and the PAL pollutant emissions is a violation of the PAL.
9. All data used to establish the PAL pollutant shall be revalidated through performance testing or other scientifically valid means approved by the board. Such testing shall occur at least once every five years after issuance of the PAL.
- M. Recordkeeping requirements shall be as follows:
1. The PAL permit shall require the owner to retain a copy of all records necessary to determine compliance with any requirement of this section and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for five years from the date of such record.
 2. The PAL permit shall require the owner to retain a copy of the following records for the duration of the PAL effective period plus five years:
 - a. A copy of the PAL permit application and any applications for revisions to the PAL; and
 - b. Each annual certification of compliance pursuant to the federal operating permit program and the data relied on in certifying the compliance.
 - N. The owner shall submit semi-annual monitoring reports and prompt deviation reports to the board in accordance with the federal operating permit program. The reports shall meet the following requirements:
 1. The semi-annual report shall be submitted to the board within 30 days of the end of each reporting period. This report shall contain the following information:
 - a. The identification of owner and the permit number.
 - b. Total annual emissions (expressed on a mass-basis in tons per year, or expressed in tons per year CO₂e) based on a 12-month rolling total for each month in the reporting period recorded pursuant to subdivision M 1 of this section.
 - c. All data relied upon, including, but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions.
 - d. A list of any emissions units modified or added to the major stationary source or GHG-only source during the preceding six-month period.
 - e. The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
 - f. A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by subdivision L 7 of this section.
 - g. A signed statement by the responsible official (as defined by the federal operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
 2. The major stationary source or GHG-only source owner shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to 9VAC5-80-110 F 2 b shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the

applicable program implementing 9VAC5-80-110 F 2 b. The reports shall contain the following information:

- a. The identification of owner and the permit number;
- b. The PAL requirement that experienced the deviation or that was exceeded;
- c. Emissions resulting from the deviation or the exceedance; and
- d. A signed statement by the responsible official (as defined by the federal operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

3. The owner shall submit to the board the results of any revalidation test or method within three months after completion of such test or method.

O. The board will not issue a PAL that does not comply with the requirements of this part after March 13, 2014. The board may supersede any PAL that was established prior to March 13, 2014, with a PAL that complies with the requirements of this section.

VA.R. Doc. No. R14-03; Filed June 4, 2015, 8:35 a.m.

STATE WATER CONTROL BOARD

Proposed Regulation

Title of Regulation: **9VAC25-260. Water Quality Standards (amending 9VAC25-260-5, 9VAC25-260-50, 9VAC25-260-140, 9VAC25-260-155, 9VAC25-260-185, 9VAC25-260-187, 9VAC25-260-310, 9VAC25-260-390, 9VAC25-260-400, 9VAC25-260-410, 9VAC25-260-415, 9VAC25-260-440, 9VAC25-260-450, 9VAC25-260-460, 9VAC25-260-470, 9VAC25-260-510, 9VAC25-260-520, 9VAC25-260-530, 9VAC25-260-540).**

Statutory Authority: § 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Public Hearing Information:

July 29, 2015 - 2 p.m. - Department of Environmental Quality, Piedmont Regional Office, 4949-A Cox Road, Glen Allen, VA 23060

Public Comment Deadline: August 28, 2015.

Agency Contact: David Whitehurst, Department of Environmental Quality, 629 East Main Street, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4121, FAX (804) 698-4032, TTY (804) 698-4021, or email david.whitehurst@deq.virginia.gov.

Basis: The Clean Water Act authorizes restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 303(c)(1) of the Clean Water Act 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 Part 131 authorize requirements and procedures for developing, reviewing,

revising, and approving water quality standards by the states as authorized by § 303(c) of the Clean Water Act. 40 CFR Part 131 specifically requires the states to adopt criteria to protect designated uses.

The State Water Control Law (§ 62.1-442. et seq. of the Code of Virginia) 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. Section 62.1-44.15 (3a) requires the State Water Control 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 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 federal Environmental Protection Agency (EPA) and the Commonwealth.

Purpose: 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 consumption of fish and shellfish, recreational uses, and conservation in general.

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) water quality characterization report and on the § 303(d) list of impaired waters. Waters not meeting standards will require development of a total maximum daily load under the Clean Water Act at § 303(e). The Water Quality Standards are the cornerstone for all of these other 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.

The environment will benefit because implementation of these amendments will result in better water quality in the Commonwealth for recreation, consumption of fish and shellfish, and protection of aquatic life.

Substance: The proposed amendments are as follows:

1. 9VAC25-260-5 - Include a definition of "wetlands."
2. 9VAC25-260-50 - Amend section so that the pH criteria in lakes and reservoirs only apply to the epilimnion of thermally stratified lakes when those lakes are stratified.
3. 9VAC25-260-140 - An amendment to the cadmium criteria for the protection of freshwater aquatic life is based on more recent EPA guidance issued in 2001 and updated with additional revisions included in a report published by the U.S Geological Survey in 2010. The proposed cadmium criteria

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are more stringent by about 50% compared to the existing Virginia criteria, but less stringent than EPA's 2001 recommendations.

Freshwater aquatic life criteria for lead are being amended to include a conversion factor. All current Virginia aquatic life criteria for metals except for lead include a conversion factor that allow for the criteria to be expressed as the dissolved fraction of the metal. The dissolved fraction is the most biologically available portion that contributes to potential toxicity. Staff recommends applying a conversion factor recommended by EPA as being applicable to the Virginia criteria for lead. This will make the criteria more stringent by approximately 5.0% to 22% because it is expressed as dissolved lead without the inclusion of any particulate lead that may be present.

Amendments are proposed to update eight human health criteria parameters due to changes in either oral slope factors for carcinogens or reference doses for noncarcinogens, which are utilized in risk assessment calculations from which the criteria are derived. The updates to the methodology for calculating human health criteria makes new criteria concentrations for carbon tetrachloride, methylene chloride, nitrobenzene, and tetrachloroethylene increase between 88% and 1779%. Updates for cyanide, Hexachloroethane, pentachlorophenol, and trichloroethylene decrease between 64% and 97% compared to the current criteria.

Acrolein and carbaryl are new proposed criteria to protect the aquatic life use. Acrolein is a biocide frequently used in recirculating process water systems for slime control and carbaryl is the active ingredient in the commonly available pesticide Sevin®.

The proposed inclusion of a "Biotic Ligand Model" for copper intended to be used on a site-specific basis. The model accounts for waterbody site-specific physiochemical characteristics for organic carbon, pH, temperature, alkalinity, calcium, chloride, magnesium, potassium, sodium, and sulfate instead of just hardness like the current criteria. Potentially it could be used in lieu of a water effects ratio study.

An amendment is proposed to delete the manganese criterion for waters designated as public water supply. The manganese criterion is based on a federally recommended secondary maximum contaminant level (SMCL) that is intended to be applied to treated drinking water as supplied to the consumers to prevent laundry staining.

4. 9VAC25-260-155 - The proposed amendments include new nationally recommended aquatic life criteria for ammonia in freshwater. Like the current criteria, the proposed criteria are calculated as a function of temperature and pH and accounts for the presence or absence of trout and early life stages of fish. The recalculated ammonia criteria incorporate toxicity data for freshwater mussels in the family Unionidae, which are the most sensitive organisms in the recalculation data base. The new criteria are more restrictive

primarily because more recent toxicity data show that mussels and snails (including endangered species) are very sensitive to ammonia and the current ammonia criteria do not provide sufficient protection for these species. Site specific options to calculate criteria omitting mussel toxicity data are proposed to be used in waters where a demonstration has been made that mussels are absent; however, consultation with U.S. Fish and Wildlife Services and the Department of Game and Inland Fisheries indicate freshwater mussels should be considered ubiquitous in Virginia and likely to be present in any perennial waterbody.

5. 9VAC25-260-310 - The proposal amends special standard "m" to include language to clarify that the effluent limitations applicable to all wastewater treatment facilities in the Chickahominy River watershed above Walker's Dam only apply to treatment facilities treating an organic nutrient source.

Staff is proposing two new special standards ("ee" and "ff") to set a recommended maximum temperature of 26°C for Tinker Creek and 28°C for sections of the Roanoke River from May 1 – October 31 that are stocked with trout only during the winter months. Current maximum temperature criteria for stockable trout waters of 21°C apply year-round.

6. 9VAC25-260-390 through 9VAC25-260-540 - Proposed amendments delete the public water supply designation for an old raw water intake on the James River in Chesterfield County previously utilized by the American Tobacco Company. Consultation with the Virginia Department of Health (VDH) indicates no known active intake for potable water has been there in the past 35 years and VDH could not find any records about a domestic water intake at that location in years prior to 1978. The property where the intake is located has changed hands several times over the years and is now owned by Sustainability Park, LLC.

There are proposed clarifications and corrections to delineations for trout stream designations, basin section description clarifications, additions of new Class VII swamp waters, water authority name changes, and other miscellaneous corrections.

Issues: The primary advantage to the public is that the updated numerical toxics criteria are based on better scientific information to protect water quality 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 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 will find the amendments pertinent to their operations, particularly where the numerical criteria are more stringent since that may require additional capital or operating costs for control in their discharge.

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

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulation. 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. Consequently, the State Water Control Board (Board) proposes numerous changes to the Water Quality Standards (9VAC25-260). Proposed amendments that potentially have economic impact include the following: 1) more stringent ammonia limits for municipal dischargers to comply with revised ammonia criteria, 2) more stringent cadmium criteria for the protection of freshwater aquatic life, 3) more stringent lead criteria, 4) updating eight human health criteria parameters, 5) reclassifying 24 waters from Class III (non-tidal free flowing waters) to Class VII (swamp waters), 6) adding site specific maximum temperature criteria for four trout-stocked waters, and 7) deleting the manganese criterion for public water supplies.

Result of Analysis. The benefits will clearly exceed costs for some proposed changes.

Estimated Economic Impact. The Water Quality Standards (9VAC25-260) are 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) water quality characterization report and on the § 303(d) list of impaired waters. Waters not meeting standards require development of a Total Maximum Daily Load (TMDL) under the Clean Water Act at § 303(e). The Boards proposed amendments are designed to enable Virginia to comply with the Clean Water Act and to reduce unnecessary costs when possible.

Several of the proposed changes will be beneficial by creating better water quality in the Commonwealth for recreation, consumption of fish and shellfish, and protection of aquatic life, as well as human health. Other proposed changes will be beneficial by lowering costs for affected facilities. The proposed increase in criteria stringencies will increase costs for some facilities.

The primary and most widespread potential cost increase associated with the proposed amendments would be from meeting more stringent ammonia limits for municipal dischargers to comply with revised ammonia criteria. The facilities most likely to be affected are those in the

Chesapeake Bay watershed with design flows less than 0.1 million gallons/day (MGD) located east of Interstate 95 and those with design flows less than 0.5 MGD west of I-95. Permittees with discharges outside of the Bay watershed, particularly those facilities that are large in volume compared to the receiving stream, may also have similar potential for financial impacts.

Ammonia Chesapeake Bay Facilities - There are approximately 220 discharge permits issued in the Chesapeake Bay watershed with either ammonia limits or ammonia monitoring requirements. Although ammonia limits or monitoring requirements are in the permits, it may be assumed those facilities with ammonia limits east of Interstate 95 with a design flow equal to or greater than 0.1 MGD and those with ammonia limits west of I-95 with a design flow equal to or greater than 0.5 MGD either currently have requirements or will be required to nitrify/denitrify to comply with the Water Quality Planning Management Regulation (9VAC25-720 et seq.) and the Chesapeake Bay Total Maximum Daily Load Watershed Implementation Plan. Those facilities utilizing a nitrification/denitrification wastewater treatment process to meet total nitrogen concentration limits greatly reduce the ammonia concentrations in effluent to very low levels and consequently will most likely meet the more stringent ammonia criteria without additional effort.

There are approximately 20 facilities east of Interstate 95 with flows less than 0.1 MGD. It is anticipated that these facilities have the greatest likelihood to incur impacts due to more stringent ammonia criteria. Of these, 17 now have numeric ammonia limits and it is likely they have nitrification capability to meet current limits; however an upgrade and/or operational procedure modification may be necessary to comply with newer, more stringent ammonia limits.

There are approximately 119 facilities west of I-95 with design flows less than 0.5 MGD. It is anticipated that these facilities have the greatest likelihood to incur impacts due to more stringent ammonia criteria. All but 2 have numeric ammonia limits now and it is likely that the facilities with numeric limits have nitrification capability to meet current limits; however an upgrade and/or operational procedure modification may be necessary to comply with newer, more stringent ammonia limits. It is not known how many of these would install a simple nitrification system or an advanced nitrification/denitrification system.

Ammonia Non-Bay Facilities - There are approximately 150 discharge permits issued outside of the Chesapeake Bay watershed with either ammonia limits or ammonia monitoring requirements. It appears likely that those with only monitoring requirements will incur costs should more stringent effluent limits be necessary. All but 8 have numeric ammonia limits now and it is likely these facilities have nitrification capability to meet current limits; however an upgrade and/or operational procedure modification may be

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necessary to comply with newer, more stringent ammonia limits.

Costs Associated with Meeting Ammonia Criteria - A simple nitrification system costs about \$372,000 for a 0.10 million gallon/day (MGD) sewage treatment plant. The cost of an advanced treatment system capable of both nitrification and denitrification (nitrogen removal) can range from \$750,000 to \$8,195,000 depending on the current level of treatment and volume of discharge. These costs are one-time capital expenditures and are unlikely to recur during the useful life of the equipment; however, operations and maintenance costs would be ongoing. Operations and maintenance for nitrification/denitrification could be \$23,000 for a 0.10-MGD plant to \$195,000 for a 0.60-MGD plant.

For a totally new 0.7 MGD plant, roughly 50% of the cost of the new oxidation ditch, and 100% of the submerged diffused outfall, etc., is attributed toward the cost for ammonia removal. In this case, roughly 9% of the total cost can be attributed to ammonia removal or roughly \$500,000 of the \$5,655,000 bid price.

A volume upgrade from 4.0 to 6.5 MGD, the cost attributable to ammonia removal is more complicated because the oxidation ditch volume is set, with no expansion of the aerator volume, but there is a hydraulic increase of the overall facility. Roughly 30% of the aeration system, filter, and digester upgrade costs, and 100% of the IFAS costs are attributable to ammonia removal. This adds up to about \$1,720,700 or roughly 13% of the overall bid price of \$13,278,600. It is estimated the cost per gallon of ammonia removal in the examples given above for the new construction is \$0.71/gallon and cost per gallon for the upgrade is \$0.26/gallon.

Cadmium - The Board proposes to amend the cadmium criteria for the protection of freshwater aquatic life to be approximately 50 percent more stringent than the current requirement but not as stringent as the United States Environmental Protection Agency's (EPA's) 2011 recommendation. There are a total of 24 active discharge permits with either numeric cadmium limits or monitoring requirements. Of these, 13 have monitoring requirements only. Monitoring requirements without discharge limits typically result from a permit review using a Reasonable Potential Analysis that indicates the facility may have a particular parameter in its effluent, ergo the monitoring requirement. The monitoring data is used in subsequent permit reissuances to determine if discharge limits should be included. Given that the cadmium freshwater criteria are becoming more stringent it is assumed facilities with only monitoring requirements may be the most likely to be affected.

Lead - The Board proposes to include a conversion factor for lead criteria to be consistent with other Virginia aquatic life criteria for metals to allow for the criteria to be expressed as the dissolved fraction of the metal. This change would make

the criteria more stringent by approximately 5 through 22 percent. There are a total of 26 active permits with either numeric lead limits or monitoring requirements. Of these, 14 have monitoring requirements only. Amending the freshwater lead criteria will change the parameter to be expressed as the dissolved portion of lead (current expression is total recoverable). Significant impacts to dischargers are not anticipated as permit limits for lead are calculated using the total recoverable form.

Amendments to Parameters for the Protection of Human Health - The Board proposes to update eight human health criteria parameters which would increase the concentrations for carbon tetrachloride, methylene chloride, nitrobenzene and tetrachloroethylene between 88 and 1779 percent. In contrast, the changes for cyanide, hexachloroethane, pentachlorophenol, and trichloroethylene would decrease between 64 and 97 percent. The cost savings from the less stringent criteria would likely approximately equal the cost increases from the more stringent criteria. In balance, the proposed change in criteria are expected to be more protective of human health without significantly increasing cost.

Reclassifying Waters from Class III to Class VII - The Board proposes to reclassify 24 waters from Class III (non-tidal free flowing waters) to the more appropriate Class VII (swamp waters). This will potentially save approximately \$18,000 each, in that Class III would inappropriately require a pH or TMDL study. In aggregate, this proposed change would produce approximately \$432,000¹ in savings.

Trout and Water Temperature - All waters classed as Stockable Trout Waters (Class V) have a year-round maximum temperature criterion of 21°C. The Department of Game and Inland Fisheries stocks trout during the winter in some warm-water rivers and streams. Given the naturally occurring temperatures of these warm-water rivers and streams, trout are not expected to survive the following summer. Application of 21°C maximum temperature year-round is inappropriate and does not reflect the natural thermal regime of these waters during the warmer seasons.

Thus the Board proposes to add site specific maximum temperature criteria that apply during warm months: May 1 to October 31. There are four waters to which this applies. This will enable facilities to avoid having to obtain unnecessary TMDLs, producing at least \$72,000 in savings.

Manganese - Deletion of the manganese criterion for public water supplies could have a similar impact in the form of cost savings due to unnecessary TMDL studies not being done.

Businesses and Entities Affected. The proposed amendments particularly affect municipal wastewater facilities and sewage treatment plants, and industrial plants that discharge to surface waters of the Commonwealth. The estimated number of potentially affected facilities due to proposed amendments to the ammonia, lead, cadmium, and human health criteria is 435 and includes those facilities with effluent limitations and those with monitoring requirements but no limits.

There are approximately 352 active Virginia Pollutant Discharge Elimination System (VPDES) permits with effluent limitations for ammonia. A significant number of those facilities may receive more stringent ammonia limits, as well as the potential for new facilities to receive limits, as the proposed water quality criteria are implemented. Significant Dischargers of nutrients (POTWs ≥ 0.1 MGD east of the fall line and ≥ 0.5 MGD west of the fall line) within the Chesapeake Bay watershed have mostly upgraded to remove Total Nitrogen and in doing so convert ammonia-N to nitrate-N. The proposed water quality criteria will therefore mostly impact smaller facilities in the Chesapeake Bay watershed and any municipal facility outside of the Chesapeake Bay watershed. As a matter of practice, wastewater treatment plants designed to meet an ammonia limitation are generally designed to fully nitrify (remove all ammonia) so lower limitations do not necessarily mean that a wastewater treatment plant upgrade would be required. For most conventional activated sludge plants not currently using nutrient reduction technology, it may just require optimizing operational procedures to meet the new limitation. The largest potential impact is expected to be on facilities that discharge to very small receiving streams and older plants that do not treat wastewater using the activated sludge process.

There are 10 active VPDES permits with effluent limitations for cadmium. Fourteen have monitoring requirements but no limits. There are 10 active VPDES permits with effluent limitations for lead. Eighteen have monitoring requirements but no limits. There are 7 active VPDES permits with effluent limitations for human health parameters. Twenty-four have monitoring requirements but no limits.

Localities Particularly Affected. The Counties of Caroline, Carroll, Charles City, Chesterfield, Essex, Gloucester, Greensville, Hanover, Henrico, King George, King & Queen, King William, New Kent, Northumberland, Middlesex, Westmoreland and the City of Suffolk are affected by amendments to reclassify certain water bodies as swamp waters. Botetourt County and the Cities of Roanoke and Salem are affected by the additional of special standards ee and ff to certain trout waters. Orange and Powhatan counties are affected by the application of special nutrient standards to two lakes. The remainder of the amendments are either applicable statewide or are not expected to impose any identified disproportionate material impact to a locality.

Projected Impact on Employment. For industrial plants that would face additional costs under the proposed amendments, the increased costs may be large enough to discourage expansion or the building of new plants. This would have a negative impact on employment. As described above, there are waters in Virginia where the proposed amendments will reduce compliance costs. For industrial plants located on these waters, the reduced costs could encourage expansion or the building of a new plant. This would have a positive impact on employment.

Effects on the Use and Value of Private Property. Depending on their particular situation in regard to the location of their discharge and the concentration of specific substances, pH, or temperature in the water at that location, firms with industrial plants that discharge to surface waters of the Commonwealth may face either increased or reduced costs.

Small Businesses: Costs and Other Effects. Some of the industrial plants that discharge to surface waters of the Commonwealth will be associated with small businesses. Some may face increased costs and others may encounter reduced costs, depending on their particular situation in regard to the location of their discharge and the concentration of specific substances, pH, or temperature in the water at that location.

Small Businesses: Alternative Method that Minimizes Adverse Impact. There are no clear alternative methods that would both comply with the Clean Water Act and cost less.

Real Estate Development Costs. The proposed amendments do not directly affect real estate development costs.

Legal Mandate. General: The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Code of Virginia and Executive Order Number 14 (2010). Section 2.2-4007.04 requires that such economic impact analyses determine the public benefits and costs of the proposed amendments. Further the report should include but not be limited to:

- the projected number of businesses or other entities to whom the proposed regulatory action would apply,
- the identity of any localities and types of businesses or other entities particularly affected,
- the projected number of persons and employment positions to be affected,
- the projected costs to affected businesses or entities to implement or comply with the regulation, and
- the impact on the use and value of private property.

Small Businesses: If the proposed regulatory action will have an adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include:

- an identification and estimate of the number of small businesses subject to the proposed regulation,
- the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the proposed regulation, including the type of professional skills necessary for preparing required reports and other documents,
- a statement of the probable effect of the proposed regulation on affected small businesses, and
- a description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation.

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Additionally, pursuant to § 2.2-4007.1, if there is a finding that a proposed regulation may have an adverse impact on small business, the Joint Commission on Administrative Rules is notified at the time the proposed regulation is submitted to the Virginia Register of Regulations for publication. This analysis shall represent DPB's best estimate for the purposes of public review and comment on the proposed regulation.

¹ \$18,000 x 24 = \$432,000

Agency's Response to Economic Impact Analysis: The Department of Environmental Quality has reviewed the economic impact analysis prepared by the Department of Planning and Budget and has no comment.

Summary:

The proposed amendments include (i) increasing the stringency of ammonia limits for municipal dischargers to comply with revised ammonia criteria, (ii) increasing the stringency of cadmium criteria for the protection of freshwater aquatic life, (iii) increasing the stringency of lead criteria, (iv) updating eight human health criteria parameters, (v) reclassifying 24 waters from Class III (nontidal free flowing waters) to Class VII (swamp waters), (vi) adding site-specific maximum temperature criteria for four trout-stocked waters, and (vii) deleting the manganese criterion for public water supplies.

Part I

Surface Water Standards with General, Statewide Application

9VAC25-260-5. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Algicides" means chemical substances, most commonly copper-based, used as a treatment method to control algae growths.

"Board" means State Water Control Board.

"Chesapeake Bay and its tidal tributaries" means all tidally influenced waters of the Chesapeake Bay; western and eastern coastal embayments and tributaries; James, York, Rappahannock and Potomac Rivers and all their tidal tributaries to the end of tidal waters in each tributary (in larger rivers this is the fall line); and includes subdivisions 1, 2, 3, 4, 5, and 6 of 9VAC25-260-390, subdivisions 1, 1b, 1d, 1f and 1o of 9VAC25-260-410, subdivisions 5 and 5a of 9VAC25-260-415, subdivisions 1 and 1a of 9VAC25-260-440, subdivisions 2, 3, 3a, 3b and 3e of 9VAC25-260-520, and subdivision 1 of 9VAC25-260-530. This definition does not include free flowing sections of these waters.

"Criteria" means elements of the board's water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use. When criteria are met, water quality will generally protect the designated use.

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

"Designated uses" means those uses specified in water quality standards for each ~~water body~~ waterbody or segment whether or not they are being attained.

"Drifting organisms" means planktonic organisms that are dependent on the current of the water for movement.

"Epilimnion" means the upper layer of nearly uniform temperature in a thermally stratified man-made lake or reservoir listed in 9VAC25-260-187 B.

"Existing uses" means those uses actually attained in the ~~water body~~ waterbody on or after November 28, 1975, whether or not they are included in the water quality standards.

"Lacustrine" means the zone within a lake or reservoir that corresponds to nonflowing lake-like conditions such as those near the dam. The other two zones within a reservoir are riverine (flowing, river-like conditions) and transitional (transition from river to lake conditions).

"Man-made lake or reservoir" means a constructed impoundment.

"Mixing zone" means a limited area or volume of water where initial dilution of a discharge takes place and where numeric water quality criteria can be exceeded but designated uses in the ~~water body~~ waterbody on the whole are maintained and lethality is prevented.

"Natural lake" means an impoundment that is natural in origin. There are two natural lakes in Virginia: Mountain Lake in Giles County and Lake Drummond located within the boundaries of Chesapeake and Suffolk in the Great Dismal Swamp.

"Passing organisms" means free swimming organisms that move with a mean velocity at least equal to the ambient current in any direction.

"Primary contact recreation" means any water-based form of recreation, the practice of which has a high probability for total body immersion or ingestion of water (examples include but are not limited to swimming, water skiing, canoeing and kayaking).

"Pycnocline" means the portion of the water column where density changes rapidly because of salinity and/or temperature. In an estuary the pycnocline is the zone separating deep, cooler more saline waters from the less saline, warmer surface waters. The upper and lower boundaries of a pycnocline are measured as a change in density per unit of depth that is greater than twice the change of the overall average for the total water column.

"Secondary contact recreation" means a water-based form of recreation, the practice of which has a low probability for total body immersion or ingestion of waters (examples include but are not limited to wading, boating and fishing).

"Swamp waters" means waters with naturally occurring low pH and low dissolved oxygen caused by: (i) low flow velocity that prevents mixing and reaeration of stagnant, shallow waters and (ii) decomposition of vegetation that lowers dissolved oxygen concentrations and causes tannic acids to color the water and lower the pH.

"Use attainability analysis" means a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors as described in 9VAC25-260-10 H.

"Water quality standards" means provisions of state or federal law which consist of a designated use or uses for the waters of the Commonwealth and water quality criteria for

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 ~~water body~~ 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 acutely¹ or chronically² toxic except as allowed in 9VAC25-260-20 B (mixing zones). The following are definitions of acute and chronic toxicity conditions:

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"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 | | |
| Acenaphthene (µg/l) 83329 | | | | | 670 | 990 |
| Acrolein (µg/l) 107028 | <u>3.0</u> | <u>3.0</u> | | | 6.1 | 9.3 |
| Acrylonitrile (µg/l) 107131 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.51 | 2.5 |
| Aldrin (µg/l) 309002 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | 3.0 | | 1.3 | | 0.00049 | 0.00050 |
| Ammonia (µg/l) 766-41-7 Chronic criterion is a 30-day average concentration not to be exceeded more than once every three (3) years on the average. (see 9VAC25-260-155) | | | | | | |
| Anthracene (µg/l) 120127 | | | | | 8,300 | 40,000 |
| Antimony (µg/l) 7440360 | | | | | 5.6 | 640 |
| Arsenic (µg/l) ⁵ 7440382 | 340 | 150 | 69 | 36 | 10 | |
| Bacteria (see 9VAC25-260-160 and 170) | | | | | | |
| Barium (µg/l) 7440393 | | | | | 2,000 | |

| | | | | | | |
|---|--|--|--|--|---------|--------|
| Benzene (µg/l) 71432 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 22 | 510 |
| Benzidine (µg/l) 92875 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.00086 | 0.0020 |
| Benzo (a) anthracene (µg/l) 56553 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.038 | 0.18 |
| Benzo (b) fluoranthene (µg/l) 205992 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.038 | 0.18 |
| Benzo (k) fluoranthene (µg/l) 207089 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.038 | 0.18 |
| Benzo (a) pyrene (µg/l) 50328 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.038 | 0.18 |
| Bis2-Chloroethyl Ether (µg/l) 111444 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.30 | 5.3 |
| Bis2-Chloroisopropyl Ether (µg/l) 108601 | | | | | 1,400 | 65,000 |
| Bis2-Ethylhexyl Phthalate (µg/l) 117817 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . Synonym = Di-2-Ethylhexyl Phthalate. | | | | | 12 | 22 |

Regulations

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|---|---|--|-------------|--------------|---------------------------|-------------------------|
| Bromoform (µg/l) 75252 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 43 | 1,400 |
| Butyl benzyl phthalate (µg/l) 85687 | | | | | 1,500 | 1,900 |
| 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) $WER = e^{\frac{1.128[\ln(\text{hardness})] - 3.828}{0.8407[\ln(\text{hardness})] - 3.279}}$ Freshwater chronic criterion (µg/l) $WER = e^{\frac{0.7852[\ln(\text{hardness})] - 3.490}{0.6247[\ln(\text{hardness})] - 3.384}}$ CF_c WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F e = natural antilogarithm ln = natural logarithm <u>CF_c = conversion factor (chronic)</u> <u>CF_c = 1.101672 - [(ln hardness)(0.041838)]</u> | 3.9 <u>1.8</u> CaCO ₃ = 100 | 4.4 <u>0.55</u> CaCO ₃ = 100 | 40 X WER | 8.8 X WER | 5 | |
| Carbon tetrachloride (µg/l) 56235 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 2.3 <u>4.3</u> | 46 <u>30</u> |
| Carbaryl (µg/l) <u>63252</u> | <u>2.1</u> | <u>2.1</u> | <u>1.6</u> | | | |
| Chlordane (µg/l) 57749 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | 2.4 | 0.0043 | 0.09 | 0.0040 | 0.0080 | 0.0081 |

| | | | | | | |
|---|-------------------------------------|------------------------------------|-------|--------|-------------------|--------|
| Chloride (µg/l) 16887006 Human Health <u>health</u> 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 | | | | | 130 | 1,600 |
| Chlorodibromomethane (µg/l) 124481 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 4.0 | 130 |
| Chloroform (µg/l) 67663 | | | | | 340 | 11,000 |
| 2-Chloronaphthalene (µg/l) 91587 | | | | | 1,000 | 1,600 |
| 2-Chlorophenol (µg/l) 95578 | | | | | 81 | 150 |
| 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. | 570 (CaCO ₃ = 100) | 74 (CaCO ₃ = 100) | | | 100 (total Cr) | |

Regulations

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|--|--|---|--------------|--------------|-----------------------------------|-------|
| <p>Freshwater acute criterion $\mu\text{g/l}$ $\text{WER} [e^{\{0.8190[\ln(\text{hardness})]+3.7256\}}]$ (CF_a)</p> <p>Freshwater chronic criterion $\mu\text{g/l}$ $\text{WER} [e^{\{0.8190[\ln(\text{hardness})]+0.6848\}}]$ (CF_c)</p> <p>WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140.F</p> <p>e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) $\text{CF}_a = 0.316$ $\text{CF}_c = 0.860$</p> | | | | | | |
| <p>Chromium VI ($\mu\text{g/l}$)⁵ 18540299</p> | 16 | 11 | 1,100 | 50 | | |
| <p>Chrysene ($\mu\text{g/l}$) 218019</p> <p>Known or suspected carcinogen; human health criteria at risk level 10^{-5}.</p> | | | | | 0.0038 <u>0.038</u> | 0.018 |
| <p>Copper ($\mu\text{g/l}$)⁵ 7440508</p> <p>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.</p> <p>Freshwater acute criterion ($\mu\text{g/l}$) $\text{WER} [e^{\{0.9422[\ln(\text{hardness})]-1.700\}}]$ (CF_a)</p> <p>Freshwater chronic criterion ($\mu\text{g/l}$) $\text{WER} [e^{\{0.8545[\ln(\text{hardness})]-1.702\}}]$ (CF_c)</p> <p>WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F.</p> <p>e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic)</p> | <p>13 $\text{CaCO}_3 =$ 100</p> | <p>9.0 $\text{CaCO}_3 =$ 100</p> | 9.3 X WER | 6.0 X WER | 1,300 | |

| | | | | | | |
|---|------|--------|------|--------|--------------------|-----------------------|
| <p>CF_a = 0.960 CF_c = 0.960 <u>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).</u> Acute saltwater criterion is a 24-hour average not to be exceeded more than once every three years on the average.</p> | | | | | | |
| Cyanide, Free (µg/l) 57125 | 22 | 5.2 | 1.0 | 1.0 | 140 4.2 | 16,000 480 |
| DDD (µg/l) 72548 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.0031 | 0.0031 |
| DDE (µg/l) 72559 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.0022 | 0.0022 |
| 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 | 0.0022 | 0.0022 |
| 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 . | | | | | 0.038 | 0.18 |
| 1,2-Dichlorobenzene (µg/l) 95501 | | | | | 420 | 1,300 |
| 1,3-Dichlorobenzene (µg/l) 541731 | | | | | 320 | 960 |

Regulations

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|--|------|-------|------|--------|---------|---------|
| 1,4 Dichlorobenzene (µg/l) 106467 | | | | | 63 | 190 |
| 3,3 Dichlorobenzidine (µg/l) 91941 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.21 | 0.28 |
| Dichlorobromomethane (µg/l) 75274 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 5.5 | 170 |
| 1,2 Dichloroethane (µg/l) 107062 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 3.8 | 370 |
| 1,1 Dichloroethylene (µg/l) 75354 | | | | | 330 | 7,100 |
| 1,2-trans-dichloroethylene (µg/l) 156605 | | | | | 140 | 10,000 |
| 2,4 Dichlorophenol (µg/l) 120832 | | | | | 77 | 290 |
| 2,4 Dichlorophenoxy acetic acid (2,4-D) (µg/l) 94757 | | | | | 100 | |
| 1,2-Dichloropropane (µg/l) 78875 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 5.0 | 150 |
| 1,3-Dichloropropene (µg/l) 542756 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 3.4 | 210 |
| Dieldrin (µg/l) 60571 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | 0.24 | 0.056 | 0.71 | 0.0019 | 0.00052 | 0.00054 |
| Diethyl Phthalate (µg/l) 84662 | | | | | 17,000 | 44,000 |
| 2,4 Dimethylphenol (µg/l) 105679 | | | | | 380 | 850 |

Regulations

| | | | | | | |
|---|-------|-------|-------|--------|---------|-----------|
| Dimethyl Phthalate (µg/l) 131113 | | | | | 270,000 | 1,100,000 |
| Di-n-Butyl Phthalate (µg/l) 84742 | | | | | 2,000 | 4,500 |
| 2,4 Dinitrophenol (µg/l) 51285 | | | | | 69 | 5,300 |
| 2-Methyl-4,6-Dinitrophenol (µg/l) 534521 | | | | | 13 | 280 |
| 2,4 Dinitrotoluene (µg/l) 121142 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 1.1 | 34 |
| Dioxin 2, 3, 7, 8- tetrachlorodibenzo-p-dioxin (µg/l) 1746016 | | | | | 5.0 E-8 | 5.1 E-8 |
| 1,2-Diphenylhydrazine (µg/l) 122667 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.36 | 2.0 |
| Dissolved Oxygen (µg/l) (See 9VAC25-260-50) | | | | | | |
| 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 | 62 | 89 |
| 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 | 62 | 89 |
| Endosulfan Sulfate (µg/l) 1031078 | | | | | 62 | 89 |
| Endrin (µg/l) 72208 | 0.086 | 0.036 | 0.037 | 0.0023 | 0.059 | 0.060 |
| Endrin Aldehyde (µg/l) 7421934 | | | | | 0.29 | 0.30 |
| Ethylbenzene (µg/l) 100414 | | | | | 530 | 2,100 |
| Fecal Coliform (see 9VAC25-260-160) | | | | | | |

Regulations

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|---|------|--------|-------|--------|---------|---------|
| Fluoranthene (µg/l) 206440 | | | | | 130 | 140 |
| Fluorene (µg/l) 86737 | | | | | 1,100 | 5,300 |
| 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 | 0.00079 | 0.00079 |
| 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 | 0.00039 | 0.00039 |
| Hexachlorobenzene (µg/l) 118741 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.0028 | 0.0029 |
| Hexachlorobutadiene (µg/l) 87683 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 4.4 | 180 |
| Hexachlorocyclohexane Alpha- BHC (µg/l) 319846 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.026 | 0.049 |
| Hexachlorocyclohexane Beta- BHC (µg/l) 319857 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.091 | 0.17 |

| | | | | | | |
|---|--|---|--------------|--------------|--------------------------|-------------------------|
| Hexachlorocyclohexane (µg/l) (Lindane) Gamma-BHC 58899 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | 0.95 | | 0.16 | | 0.98 | 1.8 |
| Hexachlorocyclopentadiene (µg/l) 77474 | | | | | 40 | 1,100 |
| Hexachloroethane (µg/l) 67721 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 14 <u>5.0</u> | 33 <u>12</u> |
| 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 . | | | | | 0.038 | 0.18 |
| Iron (µg/l) 7439896 Criterion to maintain acceptable taste, odor or aesthetic quality of drinking water and applies at the drinking water intake. | | | | | 300 | |
| Isophorone (µg/l) 78591 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 350 | 9,600 |
| 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. | 120 <u>94</u> CaCO ₃ = 100 | 14 <u>11</u> CaCO ₃ = 100 | 240 X WER | 9.3 X WER | 15 | |

Regulations

| | | | | | | |
|---|-----|------|-----|------|---------------|-------------------------------|
| <p>Freshwater acute criterion (µg/l) $WER [e^{1.273[\ln(\text{hardness})]^{-1.084}}](CF_a)$</p> <p>Freshwater chronic criterion (µg/l) $WER [e^{1.273[\ln(\text{hardness})]^{-3.259}}](CF_c)$</p> <p>WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F e = natural antilogarithm ln = natural logarithm <u>CF = conversion factor a (acute) or c (chronic)</u> $CF_a = 1.46203 - [(\ln \text{hardness})(0.145712)]$ $CF_c = 1.46203 - [(\ln \text{hardness})(0.145712)]$</p> | | | | | | |
| <p>Malathion (µg/l) 121755</p> | | 0.1 | | 0.1 | | |
| <p>Manganese (µg/l) 7439965</p> <p>Criterion to maintain acceptable taste, odor or aesthetic quality of drinking water and applies at the drinking water intake.</p> | | | | | 50 | |
| <p>Mercury (µg/l)⁵ 7439976</p> | 1.4 | 0.77 | 1.8 | 0.94 | | |
| <p>Methyl Bromide (µg/l) 74839</p> | | | | | 47 | 1,500 |
| <p>Methyl Mercury (Fish Tissue Criterion mg/kg)⁸ 22967926</p> | | | | | 0.30 | 0.30 |
| <p>Methylene Chloride (µg/l) 75092</p> <p>Known or suspected carcinogen; human health criteria at risk level 10^{-5} Synonym = Dichloromethane</p> | | | | | 46 <u>170</u> | <u>5,900</u> <u>22,000</u> |
| <p>Methoxychlor (µg/l) 72435</p> | | 0.03 | | 0.03 | 100 | |
| <p>Mirex (µg/l) 2385855</p> | | zero | | zero | | |

| | | | | | | |
|--|---|--|---------------------|----------------------|-------------------------|-----------------------------|
| <p>Nickel ($\mu\text{g/l}$)⁵ 744002</p> <p>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.</p> <p>Freshwater acute criterion ($\mu\text{g/l}$) WER $[e^{\{0.8460[\ln(\text{hardness})] + 1.312\}}]$ (CF_a)</p> <p>Freshwater chronic criterion ($\mu\text{g/l}$) WER $[e^{\{0.8460[\ln(\text{hardness})] - 0.8840\}}]$ (CF_c)</p> <p>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) $\text{CF}_a = 0.998$ $\text{CF}_c = 0.997$</p> | <p>180 $\text{CaCO}_3 =$ 100</p> | <p>20 $\text{CaCO}_3 =$ 100</p> | <p>74 X WER</p> | <p>8.2 X WER</p> | <p>610</p> | <p>4,600</p> |
| <p>Nitrate as N ($\mu\text{g/l}$) 14797558</p> | | | | | <p>10,000</p> | |
| <p>Nitrobenzene ($\mu\text{g/l}$) 98953</p> | | | | | <p>17.68</p> | <p>690.2,800</p> |
| <p>N-Nitrosodimethylamine ($\mu\text{g/l}$) 62759</p> <p>Known or suspected carcinogen; human health criteria at risk level 10^{-5}.</p> | | | | | <p>0.0069</p> | <p>30</p> |
| <p>N-Nitrosodiphenylamine ($\mu\text{g/l}$) 86306</p> <p>Known or suspected carcinogen; human health criteria at risk level 10^{-5}.</p> | | | | | <p>33</p> | <p>160.60</p> |
| <p>N-Nitrosodi-n-propylamine ($\mu\text{g/l}$) 621647</p> <p>Known or suspected carcinogen; human health criteria at risk level 10^{-5}.</p> | | | | | <p>0.050</p> | <p>5.1</p> |

Regulations

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|--|-----------------|-----------------|--------------|-------------|----------------------------|--------------------------|
| Nonylphenol ($\mu\text{g/l}$) 1044051-84852153 | 28 | 6.6 | 7.0 | 1.7 | | |
| Parathion ($\mu\text{g/l}$) 56382 | 0.065 | 0.013 | | | | |
| PCB Total ($\mu\text{g/l}$) 1336363 Known or suspected carcinogen; human health criteria at risk level 10^{-5} . | | 0.014 | | 0.030 | 0.00064 | 0.00064 |
| Pentachlorophenol ($\mu\text{g/l}$) 87865 Known or suspected carcinogen; human health criteria risk level at 10^{-5} . Freshwater acute criterion ($\mu\text{g/l}$) $e^{(1.005(\text{pH})-4.869)}$ Freshwater chronic criterion ($\mu\text{g/l}$) $e^{(1.005(\text{pH})-5.134)}$ | 8.7 pH = 7.0 | 6.7 pH = 7.0 | 13 | 7.9 | 2.7 <u>0.80</u> | 30 <u>9.1</u> |
| pH See 9VAC25-260-50 | | | | | | |
| Phenol ($\mu\text{g/l}$) 108952 | | | | | 10,000 | 860,000 |
| Phosphorus Elemental ($\mu\text{g/l}$) 7723140 | | | | 0.10 | | |
| Pyrene ($\mu\text{g/l}$) 129000 | | | | | 830 | 4,000 |
| Radionuclides Gross Alpha Particle Activity (pCi/L) Beta Particle & Photon Activity (mrem/yr) (formerly man-made radionuclides) Combined Radium 226 and 228 (pCi/L) Uranium ($\mu\text{g/L}$) | | | | | 15 4 5 30 | |
| Selenium ($\mu\text{g/l}$) 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 | 4,200 |

| | | | | | | |
|--|--|--|----------------------|--|----------------------------------|---------------------------------|
| <p>Silver ($\mu\text{g/l}$)⁵ 7440224</p> <p>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.</p> <p>Freshwater acute criterion ($\mu\text{g/l}$) WER [$e^{\{1.72[\ln(\text{hardness})]-6.52\}}$] ($\text{CF}_a$)</p> <p>WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F</p> <p>e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) $\text{CF}_a = 0.85$</p> | <p>3.4; CaCO_3 = 100</p> | | <p>1.9 X WER</p> | | | |
| <p>Sulfate ($\mu\text{g/l}$) Criterion to maintain acceptable taste, odor or aesthetic quality of drinking water and applies at the drinking water intake.</p> | | | | | <p>250,000</p> | |
| <p>Temperature See 9VAC25-260-50</p> | | | | | | |
| <p>1,1,2,2-Tetrachloroethane ($\mu\text{g/l}$) 79345</p> <p>Known or suspected carcinogen; human health criteria at risk level 10^{-5}.</p> | | | | | <p>1.7</p> | <p>40</p> |
| <p>Tetrachloroethylene ($\mu\text{g/l}$) 127184</p> <p>Known or suspected carcinogen; human health criteria at risk level 10^{-5}.</p> | | | | | <p>6.9 <u>130</u></p> | <p>33 <u>620</u></p> |
| <p>Thallium ($\mu\text{g/l}$) 7440280</p> | | | | | <p>0.24</p> | <p>0.47</p> |
| <p>Toluene ($\mu\text{g/l}$) 108883</p> | | | | | <p>510</p> | <p>6,000</p> |
| <p>Total Dissolved Solids ($\mu\text{g/l}$) Criterion to maintain acceptable taste, odor or aesthetic quality of drinking water and applies at the drinking water intake.</p> | | | | | <p>500,000</p> | |

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| | | | | | | |
|---|--------------------------------|--------------------------------|-------------|-------------|--------------------------|--------------------------|
| Toxaphene (µg/l) 8001352 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | 0.73 | 0.0002 | 0.21 | 0.0002 | 0.0028 | 0.0028 |
| Tributyltin (µg/l) 60105 | 0.46 | 0.072 | 0.42 | 0.0074 | | |
| 1, 2, 4 Trichlorobenzene (µg/l) 120821 | | | | | 35 | 70 |
| 1,1,2-Trichloroethane (µg/l) 79005 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 5.9 | 160 |
| Trichloroethylene (µg/l) 79016 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 25 <u>7.0</u> | 300 <u>82</u> |
| 2, 4, 6-Trichlorophenol (µg/l) 88062 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 14 | 24 |
| 2-(2, 4, 5-Trichlorophenoxy) propionic acid (Silvex) (µg/l) 93721 | | | | | 50 | |
| Vinyl Chloride (µg/l) 75014 Known or suspected carcinogen; human health criteria at risk level 10 ⁻⁵ . | | | | | 0.25 | 24 |
| 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(hardness)]+0.884}] (CF _a) | 120 CaCO ₃ = 100 | 120 CaCO ₃ = 100 | 90 X WER | 81 X WER | 7,400 | 26,000 |

| | | | | | | |
|--|--|--|--|--|--|--|
| <p>Freshwater chronic criterion (µg/l) WER [e^{0.8473[ln(hardness)]+0.884}] (CF_c) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F e = base e exponential function. <u>natural antilogarithm</u> ln = log normal function <u>natural logarithm</u> <u>CF = conversion factor a (acute) or c (chronic)</u> CF_a = 0.978 CF_c = 0.986</p> | | | | | | |
|--|--|--|--|--|--|--|

¹One hour average concentration not to be exceeded more than once every 3 years on the average, unless otherwise noted.

²Four-day average concentration not to be exceeded more than once every 3 years on the average, unless otherwise noted.

³Criteria 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 9VAC25-260-390-540 through 9VAC25-260-540.

⁴Criteria 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 9VAC25-260-390-540 through 9VAC25-260-540.

⁵Acute 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.

⁶The flows listed below are default design flows for calculating steady state ~~waste load~~ 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 ~~one~~ 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 ~~seven~~ 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 ~~five~~ 5 climatic years.

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"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.

⁷The 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.

⁸The 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/or~~ 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~~ 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~~ 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~~ 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 ~~above 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 (Permit Regulation).

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

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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 metal(s) 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. The Permit Regulation at 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 Environmental Protection Agency views the WER in any particular case as a site specific criterion. Therefore, the department's Division of Scientific Research or its successor shall submit the results of the study to the Environmental Protection Agency for review and approval/disapproval within 30 days of the receipt of certification from the state's Office of the Attorney General. Nonetheless, the~~ 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 the Permit 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, EPA's 2007 copper criteria (EPA-822-F-07-001) biotic ligand model (BLM) for copper may be used to determine alternate 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. 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.

9VAC25-260-155. Ammonia surface water quality criteria.

A. The Department of Environmental Quality, after consultation with the Virginia Department of Game and Inland Fisheries and the U.S. Fish and Wildlife Service, has determined that the majority of Virginia freshwaters are likely to contain, or have contained in the past, freshwater mussel species in the family Unionidae and contain early life stages of fish during most times of the year. Therefore, the ammonia criteria presented in subsections B and C of this section are designed to provide protection to these species and life stages. In an instance where it can be adequately demonstrated that either freshwater mussels or early life stages of fish are not present in a specific waterbody, potential options for alternate, site-specific criteria are presented in subsection D of this section. Acute criteria are a one-hour average concentration not to be exceeded more than once every three years¹ on the average, and chronic criteria are 30-day average concentrations not to be exceeded more than once every three years on the average².

~~A. B. The one hour average concentration of total ammonia nitrogen (in mg N/L) in freshwater shall not exceed, more than once every three years on the average¹, the acute criteria for total ammonia (in mg N/L) for freshwaters with trout absent or present are below:~~

Acute Ammonia Freshwater Criteria
Total Ammonia Nitrogen (mg N/L)

| pH | Trout Present | Trout Absent |
|-----|---------------|--------------|
| 6.5 | 32.6 | 48.8 |
| 6.6 | 31.3 | 46.8 |
| 6.7 | 29.8 | 44.6 |
| 6.8 | 28.1 | 42.0 |
| 6.9 | 26.2 | 39.1 |
| 7.0 | 24.1 | 36.1 |

| | | |
|-----|-------|------|
| 7.1 | 22.0 | 32.8 |
| 7.2 | 19.7 | 29.5 |
| 7.3 | 17.5 | 26.2 |
| 7.4 | 15.4 | 23.0 |
| 7.5 | 13.3 | 19.9 |
| 7.6 | 11.4 | 17.0 |
| 7.7 | 9.65 | 14.4 |
| 7.8 | 8.11 | 12.1 |
| 7.9 | 6.77 | 10.1 |
| 8.0 | 5.62 | 8.40 |
| 8.1 | 4.64 | 6.95 |
| 8.2 | 3.83 | 5.72 |
| 8.3 | 3.15 | 4.71 |
| 8.4 | 2.59 | 3.88 |
| 8.5 | 2.14 | 3.20 |
| 8.6 | 1.77 | 2.65 |
| 8.7 | 1.47 | 2.20 |
| 8.8 | 1.23 | 1.84 |
| 8.9 | 1.04 | 1.56 |
| 9.0 | 0.885 | 1.32 |

| Total Ammonia Nitrogen (mg N/L) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|
| TROUT PRESENT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Temperature (°C) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| pH | 0-14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | | | | | | | | | | | | |
| 6.5 | 33 | 32 | 29 | 28 | 27 | 25 | 23 | 21 | 19 | 18 | 16 | 15 | 14 | 13 | 12 | 11 | 9.9 | | | | | | | | | | | | |
| 6.6 | 31 | 30 | 28 | 26 | 24 | 22 | 21 | 20 | 18 | 17 | 16 | 14 | 13 | 12 | 11 | 10 | 9.6 | | | | | | | | | | | | |
| 6.7 | 30 | 29 | 27 | 25 | 23 | 21 | 20 | 19 | 17 | 15 | 14 | 13 | 12 | 11 | 10 | 9.2 | 8.5 | | | | | | | | | | | | |
| 6.8 | 28 | 27 | 25 | 23 | 21 | 20 | 18 | 17 | 15 | 14 | 13 | 12 | 11 | 10 | 9.4 | 8.6 | 7.9 | | | | | | | | | | | | |
| 6.9 | 26 | 25 | 23 | 21 | 20 | 18 | 17 | 15 | 14 | 13 | 12 | 11 | 10 | 9.4 | 8.6 | 8.0 | 7.3 | | | | | | | | | | | | |
| 7.0 | 24 | 23 | 21 | 20 | 18 | 17 | 15 | 14 | 13 | 12 | 11 | 10 | 9.3 | 8.5 | 7.9 | 7.2 | 6.7 | | | | | | | | | | | | |
| 7.1 | 22 | 21 | 20 | 18 | 17 | 15 | 14 | 13 | 12 | 11 | 9.8 | 9.1 | 8.3 | 7.7 | 7.1 | 6.5 | 6.0 | | | | | | | | | | | | |
| 7.2 | 20 | 19 | 18 | 16 | 15 | 13 | 12 | 11 | 10 | 9.5 | 8.7 | 8.0 | 7.4 | 6.8 | 6.3 | 5.8 | 5.3 | | | | | | | | | | | | |
| 7.3 | 18 | 17 | 16 | 14 | 13 | 12 | 11 | 9.8 | 9.0 | 8.3 | 7.7 | 7.0 | 6.5 | 6.0 | 5.5 | 5.1 | 4.7 | | | | | | | | | | | | |
| 7.4 | 15 | 15 | 14 | 13 | 12 | 11 | 9.2 | 8.5 | 7.8 | 7.2 | 6.6 | 6.1 | 5.6 | 5.2 | 4.8 | 4.4 | 4.0 | | | | | | | | | | | | |
| 7.5 | 13 | 13 | 12 | 11 | 10 | 8.6 | 7.9 | 7.3 | 6.7 | 6.2 | 5.7 | 5.2 | 4.8 | 4.4 | 4.1 | 3.8 | 3.5 | | | | | | | | | | | | |
| 7.6 | 11 | 11 | 10 | 9.3 | 8.6 | 7.9 | 7.3 | 6.7 | 6.2 | 5.7 | 5.2 | 4.8 | 4.4 | 4.1 | 3.8 | 3.2 | 3.0 | | | | | | | | | | | | |
| 7.7 | 9.6 | 9.6 | 8.6 | 7.9 | 7.3 | 6.7 | 6.1 | 5.6 | 5.2 | 4.8 | 4.4 | 4.0 | 3.7 | 3.4 | 2.9 | 2.7 | 2.5 | | | | | | | | | | | | |
| 7.8 | 8.1 | 8.1 | 7.2 | 6.7 | 6.1 | 5.6 | 5.1 | 4.7 | 4.3 | 4.0 | 3.7 | 3.4 | 3.1 | 2.9 | 2.4 | 2.2 | 2.1 | | | | | | | | | | | | |
| 7.9 | 6.8 | 6.8 | 6.0 | 5.6 | 5.1 | 4.7 | 4.2 | 3.9 | 3.6 | 3.3 | 3.0 | 2.8 | 2.6 | 2.4 | 2.0 | 1.9 | 1.7 | | | | | | | | | | | | |
| 8.0 | 5.6 | 5.6 | 5.0 | 4.6 | 4.2 | 3.9 | 3.5 | 3.2 | 3.0 | 2.7 | 2.5 | 2.3 | 2.1 | 2.0 | 1.7 | 1.5 | 1.4 | | | | | | | | | | | | |
| 8.1 | 4.6 | 4.6 | 4.1 | 3.8 | 3.5 | 3.2 | 3.0 | 2.7 | 2.4 | 2.3 | 2.1 | 1.9 | 1.8 | 1.5 | 1.4 | 1.3 | 1.2 | | | | | | | | | | | | |
| 8.2 | 3.8 | 3.8 | 3.5 | 3.1 | 2.9 | 2.7 | 2.4 | 2.3 | 2.1 | 2.1 | 1.9 | 1.8 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | | | | | | | | | | | | |
| 8.3 | 3.1 | 3.1 | 2.8 | 2.6 | 2.4 | 2.2 | 2.0 | 1.9 | 1.7 | 1.7 | 1.6 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 0.96 | | | | | | | | | | | | |
| 8.4 | 2.6 | 2.6 | 2.3 | 2.1 | 2.0 | 1.8 | 1.8 | 1.7 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 0.93 | 0.86 | 0.79 | | | | | | | | | | | | |
| 8.5 | 2.1 | 2.1 | 1.9 | 1.8 | 1.8 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 0.98 | 0.90 | 0.83 | 0.77 | 0.71 | 0.65 | | | | | | | | | | | | |
| 8.6 | 1.8 | 1.8 | 1.6 | 1.5 | 1.5 | 1.3 | 1.2 | 1.1 | 1.0 | 0.96 | 0.88 | 0.81 | 0.75 | 0.69 | 0.63 | 0.59 | 0.54 | | | | | | | | | | | | |
| 8.7 | 1.5 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 0.94 | 0.87 | 0.80 | 0.74 | 0.68 | 0.62 | 0.57 | 0.53 | 0.49 | 0.45 | | | | | | | | | | | | |
| 8.8 | 1.2 | 1.2 | 1.1 | 1.1 | 1.0 | 0.93 | 0.86 | 0.79 | 0.73 | 0.67 | 0.62 | 0.57 | 0.52 | 0.48 | 0.44 | 0.41 | 0.37 | | | | | | | | | | | | |
| 8.9 | 1.0 | 1.0 | 0.93 | 0.85 | 0.85 | 0.79 | 0.72 | 0.67 | 0.61 | 0.56 | 0.52 | 0.48 | 0.44 | 0.40 | 0.37 | 0.34 | 0.32 | | | | | | | | | | | | |
| 9.0 | 0.88 | 0.88 | 0.85 | 0.79 | 0.73 | 0.67 | 0.62 | 0.57 | 0.52 | 0.48 | 0.44 | 0.41 | 0.37 | 0.34 | 0.32 | 0.29 | 0.27 | | | | | | | | | | | | |

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The acute criteria for trout present shall apply to all Class V-Stockable Trout Waters and Class VI-Natural Trout Waters as listed in 9VAC25-260-390 through 9VAC25-260-540. The acute criteria for trout absent apply to all other fresh waters.

To calculate total ammonia nitrogen acute criteria values in freshwater at different pH values than those listed in this subsection, use the following ~~formulas~~ equations and round the result to two significant digits:

Where trout are ~~present~~ absent:

Acute Criterion Concentration (mg N/L) =

$$\frac{0.275}{(1 + 10^{7.204 - \text{pH}})} + \frac{39.0}{(1 + 10^{\text{pH} - 7.204})}$$

$$0.7249 \times \left(\frac{0.0114}{1 + 10^{7.204 - \text{pH}}} \pm \frac{1.6181}{1 + 10^{\text{pH} - 7.204}} \right) \times \text{MIN}$$

Where MIN = 51.93 or $23.12 \times 10^{0.036 \times (20 - T)}$, whichever is less.

T = Temperature in °C

Or where trout are ~~absent~~ present, whichever of the below calculation results is less:

Acute Criterion Concentration (mg N/L) =

$$\frac{0.411}{(1 + 10^{7.204 - \text{pH}})} + \frac{58.4}{(1 + 10^{\text{pH} - 7.204})}$$

$$\left(\frac{0.275}{1 + 10^{7.204 - \text{pH}}} \pm \frac{39.0}{1 + 10^{\text{pH} - 7.204}} \right)$$

Or

$$0.7249 \times \left(\frac{0.0114}{1 + 10^{7.204 - \text{pH}}} \pm \frac{1.6181}{1 + 10^{\text{pH} - 7.204}} \right) \times (23.12 \times 10^{0.036 \times (20 - T)})$$

T = Temperature in °C

⁴The default design flow for calculating steady-state waste load allocations for the acute ammonia criterion is the 1Q10 (see 9VAC25-260-140 B footnote 10) unless statistically valid methods are employed which demonstrate compliance with the duration and return frequency of the water quality criteria.

~~B. C. The 30-day average concentration of chronic criteria for total ammonia nitrogen (in mg N/L) where freshwater mussels and early life stages of fish are present in freshwater shall not exceed, more than once every three years on the average², the chronic criteria are below:~~

Chronic Ammonia Freshwater Criteria
Early Life Stages of Fish Present
Total Ammonia Nitrogen (mg N/L)

| pH | Temperature (°C) | | | | | | | | | |
|-----|------------------|------|------|------|------|------|------|------|------|------|
| | 0 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 |
| 6.5 | 6.67 | 6.67 | 6.06 | 5.33 | 4.68 | 4.12 | 3.62 | 3.18 | 2.80 | 2.46 |
| 6.6 | 6.57 | 6.57 | 5.97 | 5.25 | 4.61 | 4.05 | 3.56 | 3.13 | 2.75 | 2.42 |
| 6.7 | 6.44 | 6.44 | 5.86 | 5.15 | 4.52 | 3.98 | 3.50 | 3.07 | 2.70 | 2.37 |
| 6.8 | 6.29 | 6.29 | 5.72 | 5.03 | 4.42 | 3.89 | 3.42 | 3.00 | 2.64 | 2.32 |
| 6.9 | 6.12 | 6.12 | 5.56 | 4.89 | 4.30 | 3.78 | 3.32 | 2.92 | 2.57 | 2.25 |

Regulations

| | | | | | | | | | | |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 7.0 | 5.91 | 5.91 | 5.37 | 4.72 | 4.15 | 3.65 | 3.21 | 2.82 | 2.48 | 2.18 |
| 7.1 | 5.67 | 5.67 | 5.15 | 4.53 | 3.98 | 3.50 | 3.08 | 2.70 | 2.38 | 2.09 |
| 7.2 | 5.39 | 5.39 | 4.90 | 4.31 | 3.78 | 3.33 | 2.92 | 2.57 | 2.26 | 1.99 |
| 7.3 | 5.08 | 5.08 | 4.61 | 4.06 | 3.57 | 3.13 | 2.76 | 2.42 | 2.13 | 1.87 |
| 7.4 | 4.73 | 4.73 | 4.30 | 3.78 | 3.32 | 2.92 | 2.57 | 2.26 | 1.98 | 1.74 |
| 7.5 | 4.36 | 4.36 | 3.97 | 3.49 | 3.06 | 2.69 | 2.37 | 2.08 | 1.83 | 1.61 |
| 7.6 | 3.98 | 3.98 | 3.61 | 3.18 | 2.79 | 2.45 | 2.16 | 1.90 | 1.67 | 1.47 |
| 7.7 | 3.58 | 3.58 | 3.25 | 2.86 | 2.51 | 2.21 | 1.94 | 1.71 | 1.50 | 1.32 |
| 7.8 | 3.18 | 3.18 | 2.89 | 2.54 | 2.23 | 1.96 | 1.73 | 1.52 | 1.33 | 1.17 |
| 7.9 | 2.80 | 2.80 | 2.54 | 2.24 | 1.96 | 1.73 | 1.52 | 1.33 | 1.17 | 1.03 |
| 8.0 | 2.43 | 2.43 | 2.21 | 1.94 | 1.71 | 1.50 | 1.32 | 1.16 | 1.02 | 0.897 |
| 8.1 | 2.10 | 2.10 | 1.91 | 1.68 | 1.47 | 1.29 | 1.14 | 1.00 | 0.879 | 0.773 |
| 8.2 | 1.79 | 1.79 | 1.63 | 1.43 | 1.26 | 1.11 | 0.973 | 0.855 | 0.752 | 0.661 |
| 8.3 | 1.52 | 1.52 | 1.39 | 1.22 | 1.07 | 0.941 | 0.827 | 0.727 | 0.639 | 0.562 |
| 8.4 | 1.29 | 1.29 | 1.17 | 1.03 | 0.906 | 0.796 | 0.700 | 0.615 | 0.541 | 0.475 |
| 8.5 | 1.09 | 1.09 | 0.990 | 0.870 | 0.765 | 0.672 | 0.591 | 0.520 | 0.457 | 0.401 |
| 8.6 | 0.920 | 0.920 | 0.836 | 0.735 | 0.646 | 0.568 | 0.499 | 0.439 | 0.386 | 0.339 |
| 8.7 | 0.778 | 0.778 | 0.707 | 0.622 | 0.547 | 0.480 | 0.422 | 0.371 | 0.326 | 0.287 |
| 8.8 | 0.661 | 0.661 | 0.601 | 0.528 | 0.464 | 0.408 | 0.359 | 0.315 | 0.277 | 0.244 |
| 8.9 | 0.565 | 0.565 | 0.513 | 0.451 | 0.397 | 0.349 | 0.306 | 0.269 | 0.237 | 0.208 |
| 9.0 | 0.486 | 0.486 | 0.442 | 0.389 | 0.342 | 0.300 | 0.264 | 0.232 | 0.204 | 0.179 |

Chloride, Ammonia, Freshwater Cisterns,
Mussels, and Erosion, Slopes of Fish, Forest
Total Ammonia Nitrogen (as NH₃)

| pH | Temperature (°C) | | | | | | | | | | | | | | | | | | | | | | |
|-----|------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 6.5 | 4.6 | 4.3 | 4.1 | 3.8 | 3.6 | 3.3 | 3.1 | 2.9 | 2.8 | 2.6 | 2.4 | 2.3 | 2.1 | 2.0 | 1.9 | 1.8 | 1.8 | 1.5 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 |
| 6.6 | 4.5 | 4.3 | 4.0 | 3.8 | 3.5 | 3.3 | 3.1 | 2.9 | 2.7 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 1.8 | 1.7 | 1.5 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.1 |
| 6.7 | 4.5 | 4.2 | 3.9 | 3.7 | 3.5 | 3.2 | 3.0 | 2.8 | 2.7 | 2.5 | 2.3 | 2.2 | 2.1 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.1 |
| 6.8 | 4.4 | 4.1 | 3.8 | 3.6 | 3.4 | 3.2 | 3.0 | 2.8 | 2.6 | 2.4 | 2.3 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.1 |
| 6.9 | 4.2 | 4.0 | 3.7 | 3.5 | 3.3 | 3.1 | 2.9 | 2.7 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.1 | 1.0 |
| 7.0 | 4.1 | 3.8 | 3.6 | 3.4 | 3.2 | 3.0 | 2.8 | 2.6 | 2.4 | 2.3 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.1 | 0.99 |
| 7.1 | 4.2 | 3.9 | 3.7 | 3.5 | 3.2 | 3.0 | 2.8 | 2.7 | 2.5 | 2.3 | 2.2 | 2.1 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.1 | 0.98 |
| 7.2 | 4.0 | 3.7 | 3.5 | 3.3 | 3.1 | 2.9 | 2.7 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 0.96 | 0.96 |
| 7.3 | 3.8 | 3.5 | 3.3 | 3.1 | 2.9 | 2.7 | 2.6 | 2.4 | 2.2 | 2.1 | 2.0 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 0.97 | 0.91 | 0.88 |
| 7.4 | 3.6 | 3.3 | 3.1 | 2.9 | 2.7 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 0.98 | 0.90 | 0.85 | 0.79 |
| 7.5 | 3.2 | 3.0 | 2.8 | 2.7 | 2.5 | 2.3 | 2.2 | 2.1 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 0.95 | 0.89 | 0.83 | 0.78 | 0.73 |
| 7.6 | 2.8 | 2.8 | 2.4 | 2.3 | 2.1 | 2.0 | 1.9 | 1.8 | 1.6 | 1.5 | 1.4 | 1.4 | 1.3 | 1.2 | 1.1 | 1.1 | 0.98 | 0.92 | 0.86 | 0.81 | 0.76 | 0.71 | 0.67 |
| 7.7 | 2.6 | 2.4 | 2.3 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 0.94 | 0.88 | 0.83 | 0.78 | 0.73 | 0.68 | 0.64 | 0.60 |
| 7.8 | 2.3 | 2.2 | 2.1 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 0.95 | 0.89 | 0.84 | 0.79 | 0.74 | 0.69 | 0.65 | 0.61 | 0.57 | 0.53 |
| 7.9 | 2.1 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 0.95 | 0.89 | 0.84 | 0.79 | 0.74 | 0.69 | 0.65 | 0.61 | 0.57 | 0.53 | 0.50 | 0.47 |
| 8.0 | 1.8 | 1.7 | 1.6 | 1.4 | 1.3 | 1.2 | 1.1 | 1.1 | 0.99 | 0.92 | 0.87 | 0.81 | 0.76 | 0.71 | 0.66 | 0.64 | 0.60 | 0.56 | 0.53 | 0.49 | 0.44 | 0.44 | 0.41 |
| 8.1 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.1 | 0.99 | 0.92 | 0.87 | 0.81 | 0.76 | 0.71 | 0.67 | 0.63 | 0.59 | 0.55 | 0.52 | 0.49 | 0.45 | 0.43 | 0.40 | 0.38 | 0.35 |
| 8.2 | 1.3 | 1.2 | 1.1 | 1.0 | 0.96 | 0.90 | 0.84 | 0.79 | 0.74 | 0.70 | 0.65 | 0.61 | 0.57 | 0.54 | 0.50 | 0.47 | 0.44 | 0.42 | 0.39 | 0.37 | 0.34 | 0.32 | 0.30 |
| 8.3 | 1.1 | 1.1 | 0.99 | 0.93 | 0.87 | 0.82 | 0.76 | 0.72 | 0.67 | 0.63 | 0.59 | 0.55 | 0.49 | 0.46 | 0.43 | 0.40 | 0.38 | 0.35 | 0.33 | 0.31 | 0.29 | 0.27 | 0.26 |
| 8.4 | 0.95 | 0.89 | 0.84 | 0.79 | 0.74 | 0.69 | 0.65 | 0.61 | 0.57 | 0.53 | 0.50 | 0.47 | 0.44 | 0.39 | 0.36 | 0.34 | 0.32 | 0.30 | 0.28 | 0.26 | 0.25 | 0.23 | 0.22 |
| 8.5 | 0.80 | 0.75 | 0.71 | 0.67 | 0.63 | 0.59 | 0.55 | 0.51 | 0.49 | 0.45 | 0.42 | 0.40 | 0.37 | 0.35 | 0.33 | 0.31 | 0.29 | 0.28 | 0.24 | 0.22 | 0.21 | 0.20 | 0.19 |
| 8.6 | 0.68 | 0.64 | 0.60 | 0.56 | 0.53 | 0.49 | 0.45 | 0.41 | 0.38 | 0.36 | 0.33 | 0.31 | 0.29 | 0.28 | 0.26 | 0.24 | 0.23 | 0.21 | 0.20 | 0.18 | 0.18 | 0.16 | 0.15 |
| 8.7 | 0.57 | 0.54 | 0.51 | 0.47 | 0.44 | 0.42 | 0.39 | 0.37 | 0.34 | 0.32 | 0.30 | 0.28 | 0.27 | 0.25 | 0.23 | 0.22 | 0.21 | 0.19 | 0.18 | 0.17 | 0.16 | 0.14 | 0.13 |
| 8.8 | 0.49 | 0.46 | 0.43 | 0.40 | 0.38 | 0.35 | 0.33 | 0.31 | 0.29 | 0.27 | 0.26 | 0.24 | 0.23 | 0.21 | 0.20 | 0.19 | 0.17 | 0.16 | 0.14 | 0.13 | 0.13 | 0.12 | 0.11 |
| 8.9 | 0.42 | 0.39 | 0.37 | 0.34 | 0.32 | 0.30 | 0.28 | 0.27 | 0.25 | 0.23 | 0.22 | 0.21 | 0.19 | 0.18 | 0.17 | 0.16 | 0.14 | 0.13 | 0.12 | 0.12 | 0.11 | 0.10 | 0.08 |
| 9.0 | 0.36 | 0.34 | 0.32 | 0.28 | 0.26 | 0.24 | 0.23 | 0.21 | 0.20 | 0.19 | 0.19 | 0.17 | 0.16 | 0.15 | 0.14 | 0.14 | 0.12 | 0.11 | 0.11 | 0.10 | 0.09 | 0.08 | 0.08 |

To calculate total ammonia nitrogen chronic criteria values in freshwater when fish, freshwater mussels and early life stages of fish are present at different pH and temperature values than those listed in this subsection, use the following formulas equation and round the result to two significant digits:

Chronic Criteria Concentration =

$$\left(\frac{0.0577}{(1 + 10^{7.688 - \text{pH}})} + \frac{2.487}{(1 + 10^{\text{pH} - 7.688})} \right) \times \text{MIN}$$

Where MIN = 2.85 or 1.45 x 10^{0.028(25-T)}, whichever is less.

$$0.8876 \times \left(\frac{0.0278}{1 + 10^{7.688 - \text{pH}}} \pm \frac{1.1994}{1 + 10^{\text{pH} - 7.688}} \right) \times (2.126 \times 10^{0.028 \times (20 - \text{MAX}(T,7))})$$

Where MAX = 7 or temperature in degrees Celsius, whichever is greater.

T = temperature in °C

²The default design flow for calculating steady state waste load allocations for the chronic ammonia criterion where early life stages of fish are present is the 30Q10 (see 9VAC25-260-140-B footnote 10) unless statistically valid methods are employed which demonstrate compliance with the duration and return frequency of the water quality criteria.

D. Site-specific considerations and alternate criteria. If it can be adequately demonstrated that freshwater mussels or early life stages of fish are not present at a site, then alternate site-specific criteria can be considered using the information provided in this subsection. Recalculated site-specific criteria shall provide for the attainment and maintenance of the water quality standards of downstream waters.

1. Site-specific modifications to the ambient water quality criteria for ammonia to account for the absence of freshwater mussels or early life stages of fish shall be conducted in accordance with the procedures contained in this subdivision. Because the department presumes that most state waterbodies have freshwater mussels and early life stages of fish present during most times of the year, the criteria shall be calculated assuming freshwater mussels and early life stages of fish are present using subsections B and C of this section unless the following demonstration that freshwater mussels or early life stages of fish are absent is successfully completed. Determination of the absence of freshwater mussels requires special field survey methods. This determination must be made after an adequate survey of the waterbody is conducted by an individual certified by the Virginia Department of Game and Inland Fisheries (DGIF) for freshwater mussel identification and surveys. Determination of absence of freshwater mussels will be done in consultation with the DGIF. Early life stages of fish are defined in subdivision 2 of this subsection. Modifications to the ambient water quality criteria for ammonia based on the presence or absence of early life stages of fish shall only apply at temperatures below 15°C.

a. During the review of any new or existing activity that has a potential to discharge ammonia in amounts that may cause or contribute to a violation of the ammonia criteria contained in subsection B of this section, the department may examine data from the following approved sources in subdivisions 1 a (1) through (5) of

this subsection or may require the gathering of data in accordance with subdivisions 1 a (1) through (5) on the presence or absence of early life stages of fish in the affected waterbody.

(1) Species and distribution data contained in the Virginia Department of Game and Inland Fisheries Wildlife Information System database.

(2) Species and distribution data contained in Freshwater Fishes of Virginia, 1994.

(3) Data and fish species distribution maps contained in Handbook for Fishery Biology, Volume 3, 1997.

(4) Field data collected in accordance with U.S. EPA's Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers, Second Edition, EPA 841-B-99-002. Field data must comply with all quality assurance and quality control criteria.

(5) The American Society for Testing and Materials (ASTM) Standard E-1241-88, Standard Guide for Conducting Early Life-Stage Toxicity Tests with Fishes.

b. If data or information from sources other than subdivisions 1 a (1) through (5) of this subsection are considered, then any resulting site-specific criteria modifications shall be reviewed and adopted in accordance with the site-specific criteria provisions in 9VAC25-260-140 D, and submitted to EPA for review and approval.

c. If the department determines that the data and information obtained from subdivisions 1 a (1) through (5) of this subsection demonstrate that there are periods of each year when no early life stages are expected to be present for any species of fish that occur at the site, the department shall issue a notice to the public and make available for public comment the supporting data and analysis along with the department's preliminary decision to authorize the site-specific modification to the

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ammonia criteria. Such information shall include, at a minimum:

(1) Sources of data and information.

(2) List of fish species that occur at the site as defined in subdivision 3 of this subsection.

(3) Definition of the site. Definition of a "site" can vary in geographic size from a stream segment to a watershed to an entire eco-region.

(4) Duration of early life stage for each species in subdivision 1 c (2) of this subsection.

(5) Dates when early life stages of fish are expected to be present for each species in subdivision 1 c (2) of this subsection.

(6) Based on subdivision 1 c (5) of this subsection, identify the dates (beginning date, ending date), if any, where no early life stages are expected to be present for any of the species identified in subdivision 1 c (2) of this subsection.

d. If, after reviewing the public comments received in subdivision 1 c of this subsection and supporting data and information, the department determines that there are times of the year where no early life stages are expected to be present for any fish species that occur at the site, then the applicable ambient water quality criteria for ammonia for those time periods shall be calculated using the table in this subsection, or the formula for calculating the chronic criterion concentration for ammonia when early life stages of fish are absent.

e. The department shall maintain a comprehensive list of all sites where the department has determined that early life stages of fish are absent. For each site the list will identify the waterbodies affected and the corresponding times of the year that early life stages of fish are absent. This list is available either upon request from the Office of Water Quality Programs at 629 East Main Street, Richmond, VA 23219, or from the department website at <http://www.deq.virginia.gov/programs/water/waterqualityinformationtmdls/waterqualitystandards.aspx>.

2. The duration of the "early life stages" extends from the beginning of spawning through the end of the early life stages. The early life stages include the prehatch embryonic period, the post-hatch free embryo or yolk-sac fry, and the larval period, during which the organism feeds. Juvenile fish, which are anatomically similar to adults, are not considered an early life stage. The duration of early life stages can vary according to fish species. The department considers the sources of information in subdivisions 1 a (1) through (5) of this subsection to be the only acceptable sources of information for determining the duration of early life stages of fish under this procedure.

3. "Occur at the site" includes the species, genera, families, orders, classes, and phyla that are usually present at the site; are present at the site only seasonally due to

migration; are present intermittently because they periodically return to or extend their ranges into the site; or were present at the site in the past or are present in nearby bodies of water, but are not currently present at the site due to degraded conditions, and are expected to return to the site when conditions improve. "Occur at the site" does not include taxa that were once present at the site but cannot exist at the site now due to permanent physical alteration of the habitat at the site.

4. Any modifications to ambient water quality criteria for ammonia in subdivision 1 of this subsection shall not likely jeopardize the continued existence of any federal or state listed, threatened, or endangered species or result in the destruction or adverse modification of such species' critical habitats.

5. Site-specific modifications to the ambient water quality criteria for ammonia to account for the absence of freshwater mussels shall be conducted in accordance with the procedures contained in this subdivision. Because the department presumes that most state waterbodies have freshwater mussel species, the criteria shall be calculated assuming mussels are present using subsections B and C of this section unless the demonstration that freshwater mussels are absent is successfully completed and accepted by DEQ and DGIF.

6. Equations for calculating ammonia criteria for four different site-specific scenarios are provided below as follows: (i) acute criteria when mussels are absent but trout are present, (ii) acute criteria when mussels and trout are absent, (iii) chronic criteria when mussels are absent and early life stages of fish are present, and (iv) chronic criteria when mussels and early life stages of fish are absent. Additional information regarding site-specific criteria can be reviewed in appendix N (pages 225-242) of the EPA Aquatic Life Ambient Water Quality Criteria to Ammonia-Freshwater 2013 (EPA 822-R-13-001).

a. Acute criteria: freshwater mussels absent and trout present.

To calculate total ammonia nitrogen acute criteria values (in mg N/L) in freshwater with freshwater mussels absent (procedures for making this determination are in subdivisions 1 through 5 of this subsection) and trout present, use the equations below. The acute criterion is the lesser of the calculation results below. Round the result to two significant digits.

$$\left(\frac{0.275}{1 + 10^{7.204 - \text{pH}}} \pm \frac{39}{1 + 10^{\text{pH} - 7.204}} \right)$$

Or

$$0.7249 \times \left(\frac{0.0114}{1 + 10^{7.204 - \text{pH}}} \pm \frac{1.6181}{1 + 10^{\text{pH} - 7.204}} \right) \times (62.15 \times 10^{0.036 \times (20 - T)})$$

b. Acute criteria: freshwater mussels absent and trout absent.

To calculate total ammonia nitrogen acute criteria values (in mg N/L) in freshwater where freshwater mussels are absent and trout are absent, use the following equation. Round the result to two significant digits.

$$0.7249 \times \left(\frac{0.0114}{1 + 10^{7.204 - \text{pH}}} \pm \frac{1.6181}{1 + 10^{\text{pH} - 7.204}} \right) \times \text{MIN}$$

Where MIN = 51.93 or $62.15 \times 10^{0.036 \times (20 - T)}$, whichever is less.

T = Temperature in °C.

c. Chronic criteria: freshwater mussels absent and early life stages of fish present.

~~C. The 30-day average concentration of~~ The chronic criteria for total ammonia nitrogen (in mg N/L) where ~~early life stages of fish~~ freshwater mussels are absent (procedures for making this determination are in subdivisions 1 through 4 5 of this subsection) in freshwater shall not exceed, ~~more than once every three years on the average³, the chronic criteria concentration values calculated using the equation below~~. Round the result to two significant digits.

Chronic Ammonia Freshwater Criteria
Early Life Stages of Fish Absent
Total Ammonia Nitrogen (mg N/L)

| pH | Temperature (°C) | | | | | | | | | |
|-----|------------------|------|------|------|------|------|------|------|------|------|
| | 0-7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 6.5 | 10.8 | 10.1 | 9.51 | 8.92 | 8.36 | 7.84 | 7.35 | 6.89 | 6.46 | 6.06 |
| 6.6 | 10.7 | 9.99 | 9.37 | 8.79 | 8.24 | 7.72 | 7.24 | 6.79 | 6.36 | 5.97 |
| 6.7 | 10.5 | 9.81 | 9.20 | 8.62 | 8.08 | 7.58 | 7.11 | 6.66 | 6.25 | 5.86 |
| 6.8 | 10.2 | 9.58 | 8.98 | 8.42 | 7.90 | 7.40 | 6.94 | 6.51 | 6.10 | 5.72 |
| 6.9 | 9.93 | 9.31 | 8.73 | 8.19 | 7.68 | 7.20 | 6.75 | 6.33 | 5.93 | 5.56 |
| 7.0 | 9.60 | 9.00 | 8.43 | 7.91 | 7.41 | 6.95 | 6.52 | 6.11 | 5.73 | 5.37 |
| 7.1 | 9.20 | 8.63 | 8.09 | 7.58 | 7.11 | 6.67 | 6.25 | 5.86 | 5.49 | 5.15 |
| 7.2 | 8.75 | 8.20 | 7.69 | 7.21 | 6.76 | 6.34 | 5.94 | 5.57 | 5.22 | 4.90 |
| 7.3 | 8.24 | 7.73 | 7.25 | 6.79 | 6.37 | 5.97 | 5.60 | 5.25 | 4.92 | 4.61 |
| 7.4 | 7.69 | 7.21 | 6.76 | 6.33 | 5.94 | 5.57 | 5.22 | 4.89 | 4.59 | 4.30 |
| 7.5 | 7.09 | 6.64 | 6.23 | 5.84 | 5.48 | 5.13 | 4.81 | 4.51 | 4.23 | 3.97 |
| 7.6 | 6.46 | 6.05 | 5.67 | 5.32 | 4.99 | 4.68 | 4.38 | 4.11 | 3.85 | 3.61 |
| 7.7 | 5.81 | 5.45 | 5.11 | 4.79 | 4.49 | 4.21 | 3.95 | 3.70 | 3.47 | 3.25 |
| 7.8 | 5.17 | 4.84 | 4.54 | 4.26 | 3.99 | 3.74 | 3.51 | 3.29 | 3.09 | 2.89 |
| 7.9 | 4.54 | 4.26 | 3.99 | 3.74 | 3.51 | 3.29 | 3.09 | 2.89 | 2.71 | 2.54 |
| 8.0 | 3.95 | 3.70 | 3.47 | 3.26 | 3.05 | 2.86 | 2.68 | 2.52 | 2.36 | 2.21 |

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| | | | | | | | | | | |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 8.1 | 3.41 | 3.19 | 2.99 | 2.81 | 2.63 | 2.47 | 2.31 | 2.17 | 2.03 | 1.91 |
| 8.2 | 2.91 | 2.73 | 2.56 | 2.40 | 2.25 | 2.11 | 1.98 | 1.85 | 1.74 | 1.63 |
| 8.3 | 2.47 | 2.32 | 2.18 | 2.04 | 1.91 | 1.79 | 1.68 | 1.58 | 1.48 | 1.39 |
| 8.4 | 2.09 | 1.96 | 1.84 | 1.73 | 1.62 | 1.52 | 1.42 | 1.33 | 1.25 | 1.17 |
| 8.5 | 1.77 | 1.66 | 1.55 | 1.46 | 1.37 | 1.28 | 1.20 | 1.13 | 1.06 | 0.990 |
| 8.6 | 1.49 | 1.40 | 1.31 | 1.23 | 1.15 | 1.08 | 1.01 | 0.951 | 0.892 | 0.836 |
| 8.7 | 1.26 | 1.18 | 1.11 | 1.04 | 0.976 | 0.915 | 0.858 | 0.805 | 0.754 | 0.707 |
| 8.8 | 1.07 | 1.01 | 0.944 | 0.885 | 0.829 | 0.778 | 0.729 | 0.684 | 0.641 | 0.601 |
| 8.9 | 0.917 | 0.860 | 0.806 | 0.756 | 0.709 | 0.664 | 0.623 | 0.584 | 0.548 | 0.513 |
| 9.0 | 0.790 | 0.740 | 0.694 | 0.651 | 0.610 | 0.572 | 0.536 | 0.503 | 0.471 | 0.442 |

At 15°C and above, the criterion for fish early life stages absent is the same as the criterion for fish early life stages present.

To calculate total ammonia nitrogen chronic criteria values in freshwater when fish early life stages are absent at different pH and temperature values than those listed in this subsection, use the following formulas:

Chronic Criteria Concentration =

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

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

$$0.9405 \times \left(\frac{0.0278}{1 + 10^{7.688 - \text{pH}}} \pm \frac{1.1994}{1 + 10^{\text{pH} - 7.688}} \right) \times \text{MIN}$$

Where MIN = 6.920 or 7.547 X 10^{0.028 x (20 - T)} whichever is less

T = temperature in °C

³The default design flow for calculating steady state waste load allocations for the chronic ammonia criterion where early life stages of fish are absent is the 30Q10 (see 9VAC25-260-140 B footnote 10) unless statistically valid methods are employed that demonstrate compliance with the duration and return frequency of the water quality criteria.

1. Site specific modifications to the ambient water quality criteria for ammonia to account for the absence of early life stages of fish shall be conducted in accordance with the procedures contained in this subdivision. Because the department presumes that most state waterbodies have early life stages of fish present during most times of the year, the criteria shall be calculated assuming early life stages of fish are present using subsection B of this section unless the following demonstration that early life stages are absent is successfully completed. Early life stages of fish are defined in subdivision 2 of this subsection. Modifications to the ambient water quality criteria for ammonia based on the presence or absence of early life stages of fish shall only apply at temperatures below 15°C:

a. During the review of any new or existing activity that has a potential to discharge ammonia in amounts that may cause or contribute to a violation of the ammonia criteria contained in subsection B of this section, the department may examine data from the following approved sources in subdivisions 1 a (1) through (5) of this subsection or may require the gathering of data in accordance with subdivisions 1 a (1) through (5) on the presence or absence of early life stages of fish in the affected waterbody.

(1) Species and distribution data contained in the Virginia Department of Game and Inland Fisheries Wildlife Information System database.

(2) Species and distribution data contained in Freshwater Fishes of Virginia, 1994.

(3) Data and fish species distribution maps contained in Handbook for Fishery Biology, Volume 3, 1997.

(4) Field data collected in accordance with U.S. EPA's Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers, Second Edition, EPA 841-B-99-002. Field data must comply with all quality assurance/quality control criteria.

(5) The American Society for Testing and Materials (ASTM) Standard E 1241-88, Standard Guide for Conducting Early Life Stage Toxicity Tests with Fishes.

b. If data or information from sources other than subdivisions 1 a (1) through (5) of this subsection are considered, then any resulting site specific criteria modifications shall be reviewed and adopted in accordance with the site specific criteria provisions in 9VAC25-260-140-D, and submitted to EPA for review and approval.

c. If the department determines that the data and information obtained from subdivisions 1 a (1) through (5) of this subsection demonstrate that there are periods of each year when no early life stages are expected to be present for any species of fish that occur at the site, the department shall issue a notice to the public and make available for public comment the supporting data and analysis along with the department's preliminary decision to authorize the site specific modification to the ammonia criteria. Such information shall include, at a minimum:

(1) Sources of data and information.

(2) List of fish species that occur at the site as defined by subdivision 3 of this subsection.

(3) Definition of the site. Definition of a "site" can vary in geographic size from a stream segment to a watershed to an entire eco-region.

(4) Duration of early life stage for each species in subdivision 1 c (2) of this subsection.

(5) Dates when early life stages of fish are expected to be present for each species in subdivision 1 c (2) of this subsection.

(6) Based on subdivision 1 c (5) of this subsection, identify the dates (beginning date, ending date), if any, where no early life stages are expected to be present for any of the species identified in subdivision 1 c (2) of this subsection.

d. If, after reviewing the public comments received in subdivision 1 c of this subsection and supporting data and information, the department determines that there are times of the year where no early life stages are expected to be present for any fish species that occur at the site, then the applicable ambient water quality criteria for ammonia for those time periods shall be calculated using the table in this subsection, or the formula for calculating the chronic criterion concentration for ammonia when fish early life stages are absent.

e. The department shall maintain a comprehensive list of all sites where the department has determined that early life stages of fish are absent. For each site the list will identify the waterbodies affected and the corresponding times of the year that early life stages are absent. This list is available either upon request from the Office of Water Quality Programs at P.O. Box 1105, Richmond, Virginia 23218 or from the department website <http://www.deq.virginia.gov/wqs>.

2. The duration of the "early life stages" extends from the beginning of spawning through the end of the early life stages. The early life stages include the pre-hatch embryonic period, the post hatch free embryo or yolk sac fry, and the larval period, during which the organism feeds. Juvenile fish, which are anatomically similar to adults, are not considered an early life stage. The duration of early life stages can vary according to fish species. The department considers the sources of information in subdivisions 1 a (1) through (5) of this subsection to be the only acceptable sources of information for determining the duration of early life stages of fish under this procedure.

3. "Occur at the site" includes the species, genera, families, orders, classes, and phyla that: are usually present at the site; are present at the site only seasonally due to migration; are present intermittently because they periodically return to or extend their ranges into the site; were present at the site in the past or are present in nearby bodies of water, but are not currently present at the site due to degraded conditions, and are expected to return to the site when conditions improve. "Occur at the site" does not include taxa that were once present at the site but cannot exist at the site now due to permanent physical alteration of the habitat at the site.

4. Any modifications to ambient water quality criteria for ammonia in subdivision 1 of this subsection shall not likely jeopardize the continued existence of any federal or state listed, threatened or endangered species or result in the destruction or adverse modification of such species' critical habitat.

d. Chronic criteria: freshwater mussels absent and early life stages of fish absent.

The chronic criteria for total ammonia nitrogen (in mg N/L) where freshwater mussels are absent and early life stages of fish are absent (procedures for making this determination are in subdivisions 1 through 5 of this subsection in freshwater shall not exceed concentration values calculated using the equation below. Round the result to two significant digits.

$$0.9405 \times \left(\frac{0.0278}{1 + 10^{7.688 - \text{pH}}} \pm \frac{1.1994}{1 + 10^{\text{pH} - 7.688}} \right) \times (7.547 \times 10^{0.028 \times (20 - \text{MAX}(T, 7))})$$

Where MAX = 7 or temperature in degrees Celsius, whichever is greater.

T = temperature in °C

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D. E. The one-hour average concentration of total ammonia nitrogen (in mg N/L) in saltwater shall not exceed, more than once every three years on the average, the acute criteria below:

Acute Ammonia Saltwater Criteria
Total Ammonia Nitrogen (mg N/L)
Salinity = 10 g/kg

| pH | Temperature °C | | | | | | | |
|------|----------------|-------|-------|-------|-------|-------|-------|-------|
| | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 |
| 7.00 | 231.9 | 159.8 | 110.1 | 75.88 | 52.31 | 36.08 | 24.91 | 17.21 |
| 7.20 | 146.4 | 100.9 | 69.54 | 47.95 | 33.08 | 22.84 | 15.79 | 10.93 |
| 7.40 | 92.45 | 63.73 | 43.94 | 30.32 | 20.94 | 14.48 | 10.03 | 6.97 |
| 7.60 | 58.40 | 40.28 | 27.80 | 19.20 | 13.28 | 9.21 | 6.40 | 4.47 |
| 7.80 | 36.92 | 25.48 | 17.61 | 12.19 | 8.45 | 5.88 | 4.11 | 2.89 |
| 8.00 | 23.37 | 16.15 | 11.18 | 7.76 | 5.40 | 3.78 | 2.66 | 1.89 |
| 8.20 | 14.81 | 10.26 | 7.13 | 4.97 | 3.48 | 2.46 | 1.75 | 1.27 |
| 8.40 | 9.42 | 6.54 | 4.57 | 3.20 | 2.27 | 1.62 | 1.18 | 0.87 |
| 8.60 | 6.01 | 4.20 | 2.95 | 2.09 | 1.50 | 1.09 | 0.81 | 0.62 |
| 8.80 | 3.86 | 2.72 | 1.93 | 1.39 | 1.02 | 0.76 | 0.58 | 0.46 |
| 9.00 | 2.51 | 1.79 | 1.29 | 0.95 | 0.71 | 0.55 | 0.44 | 0.36 |

Salinity = 20 g/kg

| pH | Temperature °C | | | | | | | |
|------|----------------|-------|-------|-------|-------|-------|-------|-------|
| | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 |
| 7.00 | 247.6 | 170.5 | 117.5 | 80.98 | 55.83 | 38.51 | 26.58 | 18.36 |
| 7.20 | 156.3 | 107.7 | 74.21 | 51.17 | 35.30 | 24.37 | 16.84 | 11.66 |
| 7.40 | 98.67 | 68.01 | 46.90 | 32.35 | 22.34 | 15.44 | 10.70 | 7.43 |
| 7.60 | 62.33 | 42.98 | 29.66 | 20.48 | 14.17 | 9.82 | 6.82 | 4.76 |
| 7.80 | 39.40 | 27.19 | 18.78 | 13.00 | 9.01 | 6.26 | 4.37 | 3.07 |
| 8.00 | 24.93 | 17.23 | 11.92 | 8.27 | 5.76 | 4.02 | 2.83 | 2.01 |
| 8.20 | 15.80 | 10.94 | 7.59 | 5.29 | 3.70 | 2.61 | 1.86 | 1.34 |
| 8.40 | 10.04 | 6.97 | 4.86 | 3.41 | 2.41 | 1.72 | 1.24 | 0.91 |
| 8.60 | 6.41 | 4.47 | 3.14 | 2.22 | 1.59 | 1.15 | 0.85 | 0.65 |
| 8.80 | 4.11 | 2.89 | 2.05 | 1.47 | 1.07 | 0.80 | 0.61 | 0.48 |
| 9.00 | 2.67 | 1.90 | 1.36 | 1.00 | 0.75 | 0.57 | 0.46 | 0.37 |

Salinity = 30 g/kg

| pH | Temperature °C | | | | | | | |
|------|----------------|-------|-------|-------|-------|-------|-------|-------|
| | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 |
| 7.00 | 264.6 | 182.3 | 125.6 | 86.55 | 59.66 | 41.15 | 28.39 | 19.61 |
| 7.20 | 167.0 | 115.1 | 79.31 | 54.68 | 37.71 | 26.03 | 17.99 | 12.45 |

| | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|------|
| 7.40 | 105.5 | 72.68 | 50.11 | 34.57 | 23.87 | 16.50 | 11.42 | 7.92 |
| 7.60 | 66.61 | 45.93 | 31.69 | 21.88 | 15.13 | 10.48 | 7.28 | 5.07 |
| 7.80 | 42.10 | 29.05 | 20.07 | 13.88 | 9.62 | 6.68 | 4.66 | 3.27 |
| 8.00 | 26.63 | 18.40 | 12.73 | 8.83 | 6.14 | 4.29 | 3.01 | 2.13 |
| 8.20 | 16.88 | 11.68 | 8.10 | 5.64 | 3.94 | 2.78 | 1.97 | 1.42 |
| 8.40 | 10.72 | 7.44 | 5.18 | 3.63 | 2.56 | 1.82 | 1.31 | 0.96 |
| 8.60 | 6.83 | 4.77 | 3.34 | 2.36 | 1.69 | 1.22 | 0.90 | 0.68 |
| 8.80 | 4.38 | 3.08 | 2.18 | 1.56 | 1.13 | 0.84 | 0.64 | 0.50 |
| 9.00 | 2.84 | 2.01 | 1.45 | 1.06 | 0.79 | 0.60 | 0.47 | 0.39 |

To calculate total ammonia nitrogen acute criteria values in saltwater at different pH and temperature values than those listed in this subsection, use the following formulas:

$$I = \frac{19.9273S}{(1000 - 1.005109S)}$$

Where I = molal ionic strength of water

S = Salinity ppt (g/kg)

The regression model used to relate I to pKa (negative log of the ionization constant) is

$$pKa = 9.245 + 0.138(I)$$

pKa as defined by these equations is at 298 degrees Kelvin (25°C). T °Kelvin = °C + 273

To correct for other temperatures:

$$pKa^S_T = pKa^S_{298} + 0.0324(298 - T \text{ °Kelvin})$$

The unionized ammonia fraction (UIA) is given by:

$$UIA = \frac{1}{1 + 10^{(pKa^S_T - pH)}}$$

The acute ammonia criterion in saltwater is given by:

$$Acute = \frac{0.233}{UIA}$$

Multiply the acute value by 0.822 to get the ammonia-N acute criterion.

E. F. The 30-day average concentration of total ammonia nitrogen (in mg N/L) in saltwater shall not exceed, more than once every three years on the average, the chronic criteria below:

Chronic Ammonia Saltwater Criteria
Total Ammonia Nitrogen (mg N/L)
Salinity = 10 g/kg

| pH | Temperature °C | | | | | | | |
|------|----------------|-------|-------|-------|------|------|------|------|
| | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 |
| 7.00 | 34.84 | 24.00 | 16.54 | 11.40 | 7.86 | 5.42 | 3.74 | 2.59 |
| 7.20 | 21.99 | 15.15 | 10.45 | 7.20 | 4.97 | 3.43 | 2.37 | 1.64 |
| 7.40 | 13.89 | 9.57 | 6.60 | 4.55 | 3.15 | 2.18 | 1.51 | 1.05 |
| 7.60 | 8.77 | 6.05 | 4.18 | 2.88 | 2.00 | 1.38 | 0.96 | 0.67 |
| 7.80 | 5.55 | 3.83 | 2.65 | 1.83 | 1.27 | 0.88 | 0.62 | 0.43 |

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| | | | | | | | | |
|------|------|------|------|------|------|------|------|------|
| 8.00 | 3.51 | 2.43 | 1.68 | 1.17 | 0.81 | 0.57 | 0.40 | 0.28 |
| 8.20 | 2.23 | 1.54 | 1.07 | 0.75 | 0.52 | 0.37 | 0.26 | 0.19 |
| 8.40 | 1.41 | 0.98 | 0.69 | 0.48 | 0.34 | 0.24 | 0.18 | 0.13 |
| 8.60 | 0.90 | 0.63 | 0.44 | 0.31 | 0.23 | 0.16 | 0.12 | 0.09 |
| 8.80 | 0.58 | 0.41 | 0.29 | 0.21 | 0.15 | 0.11 | 0.09 | 0.07 |
| 9.00 | 0.38 | 0.27 | 0.19 | 0.14 | 0.11 | 0.08 | 0.07 | 0.05 |

Salinity = 20 g/kg

| pH | Temperature °C | | | | | | | |
|------|----------------|-------|-------|-------|------|------|------|------|
| | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 |
| 7.00 | 37.19 | 25.62 | 17.65 | 12.16 | 8.39 | 5.78 | 3.99 | 2.76 |
| 7.20 | 23.47 | 16.17 | 11.15 | 7.69 | 5.30 | 3.66 | 2.53 | 1.75 |
| 7.40 | 14.82 | 10.22 | 7.04 | 4.86 | 3.36 | 2.32 | 1.61 | 1.12 |
| 7.60 | 9.36 | 6.46 | 4.46 | 3.08 | 2.13 | 1.47 | 1.02 | 0.71 |
| 7.80 | 5.92 | 4.08 | 2.82 | 1.95 | 1.35 | 0.94 | 0.66 | 0.46 |
| 8.00 | 3.74 | 2.59 | 1.79 | 1.24 | 0.86 | 0.60 | 0.43 | 0.30 |
| 8.20 | 2.37 | 1.64 | 1.14 | 0.79 | 0.56 | 0.39 | 0.28 | 0.20 |
| 8.40 | 1.51 | 1.05 | 0.73 | 0.51 | 0.36 | 0.26 | 0.19 | 0.14 |
| 8.60 | 0.96 | 0.67 | 0.47 | 0.33 | 0.24 | 0.17 | 0.13 | 0.10 |
| 8.80 | 0.62 | 0.43 | 0.31 | 0.22 | 0.16 | 0.12 | 0.09 | 0.07 |
| 9.00 | 0.40 | 0.28 | 0.20 | 0.15 | 0.11 | 0.09 | 0.07 | 0.06 |

Salinity = 30 g/kg

| pH | Temperature °C | | | | | | | |
|------|----------------|-------|-------|-------|------|------|------|------|
| | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 |
| 7.00 | 39.75 | 27.38 | 18.87 | 13.00 | 8.96 | 6.18 | 4.27 | 2.95 |
| 7.20 | 25.09 | 17.29 | 11.91 | 8.21 | 5.67 | 3.91 | 2.70 | 1.87 |
| 7.40 | 15.84 | 10.92 | 7.53 | 5.19 | 3.59 | 2.48 | 1.72 | 1.19 |
| 7.60 | 10.01 | 6.90 | 4.76 | 3.29 | 2.27 | 1.57 | 1.09 | 0.76 |
| 7.80 | 6.32 | 4.36 | 3.01 | 2.08 | 1.44 | 1.00 | 0.70 | 0.49 |
| 8.00 | 4.00 | 2.76 | 1.91 | 1.33 | 0.92 | 0.64 | 0.45 | 0.32 |
| 8.20 | 2.53 | 1.75 | 1.22 | 0.85 | 0.59 | 0.42 | 0.30 | 0.21 |
| 8.40 | 1.61 | 1.12 | 0.78 | 0.55 | 0.38 | 0.27 | 0.20 | 0.14 |
| 8.60 | 1.03 | 0.72 | 0.50 | 0.35 | 0.25 | 0.18 | 0.14 | 0.10 |
| 8.80 | 0.66 | 0.46 | 0.33 | 0.23 | 0.17 | 0.13 | 0.10 | 0.08 |
| 9.00 | 0.43 | 0.30 | 0.22 | 0.16 | 0.12 | 0.09 | 0.07 | 0.06 |

To calculate total ammonia nitrogen chronic criteria values in saltwater at different pH and temperature values than those listed in this subsection, use the following formulas:

$$I = \frac{19.9273S}{(1000 - 1.005109S)}$$

Where I = molal ionic strength of water

S = Salinity ppt (g/kg)

The regression model used to relate I to pKa (negative log of the ionization constant) is

$$pKa = 9.245 + \frac{0.138(I)}{1 + 0.138(I)}$$

pKa as defined by these equations is at 298 degrees Kelvin (25°C). T °Kelvin = °C + 273

To correct for other temperatures:

$$pKa^S_T = pKa^S_{298} + \frac{0.0324(298 - T \text{ °Kelvin})}{1 + 0.0324(298 - T \text{ °Kelvin})}$$

The unionized ammonia fraction (UIA) is given by:

$$UIA = \frac{1}{1 + 10^{(pKa^S_T - pH)}}$$

The chronic ammonia criterion in saltwater is given by:

$$\text{Chronic} = \frac{0.035}{UIA}$$

Multiply the chronic value by 0.822 to get the ammonia-N chronic criterion.

¹The default design flow for calculating steady state wasteload allocations for the acute ammonia criterion for freshwater is the 1Q10 (see 9VAC25-260-140 B footnote 10) unless statistically valid methods are employed which demonstrate compliance with the duration and return frequency of the water quality criteria.

²The default design flow for calculating steady state wasteload allocations for the chronic ammonia criterion for freshwater is the 30Q10 (see 9VAC25-260-140 B footnote 10) unless statistically valid methods are employed which demonstrate compliance with the duration and return frequency of the water quality criteria.

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 below 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 |

¹In applying this open water instantaneous criterion to the Chesapeake Bay and its tidal tributaries where the existing water quality for dissolved oxygen exceeds an instantaneous minimum of 3.2 mg/l, that higher water quality for dissolved oxygen shall be provided antidegradation protection in accordance with 9VAC25-260-30 A 2.

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

Regulations

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

| Designated Use | Chesapeake Bay Program Segment | SAV Acres ¹ | Percent Light-Through-Water ² | Water Clarity Acres ¹ | Temporal Application |
|---|--------------------------------|------------------------|--|----------------------------------|-----------------------|
| Shallow Water Submerged Aquatic Vegetation Use 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 | 22% | 5000 | 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 | 13% | 500 | April 1 - October 31 |
| | JMSTF1 | 1000 | 13% | 2500 | April 1 - October 31 |
| | APPTF | 379 | 13% | 948 | April 1 - October 31 |
| | JMSOH | 15 | 13% | 38 | April 1 - October 31 |
| | CHKOH | 535 | 13% | 1,338 | April 1 - October 31 |
| | JMSMH | 200 | 22% | 500 | April 1 - October 31 |
| | JMSPH | 300 | 22% | 750 | March 1 - November 30 |
| WBEMH | - | - | - | - | |
| SBEMH | - | - | - | - | |
| EBEMH | - | - | - | - | |
| ELIPH | - | - | - | - | |
| LYNPH | 107 | 22% | 268 | March 1 - November 30 | |

| | | | | | |
|--|-------|--------|-----|--------|----------------------|
| | POCOH | - | - | - | - |
| | POCMH | 4,066 | 22% | 9,368 | April 1 - October 31 |
| | TANMH | 13,579 | 22% | 22,064 | April 1 - October 31 |

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

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

C. Chlorophyll a.

| Designated Use | Chlorophyll a Narrative Criterion | Temporal Application |
|----------------------------|---|------------------------|
| Open <u>Water</u> 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 |

| 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 | MPNTF | Mouth of the | ELIPH |

*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 below and shall be used as the spatial assessment unit to determine attainment of the criteria in this section for each designated use.

Regulations

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

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

2. The assessment period shall be the most recent three consecutive years. When three consecutive years of data are not available, a minimum of three years within the 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), and 2010 (CBP/TRS 301-10, EPA 903-R-10-002) 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 ~~water body~~ waterbody in each of the two most recent monitoring years that chlorophyll a data are available. For a ~~water body~~ 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) |
|--|------------------|----------------------|-------------------------|
| Able 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 |

Regulations

| | | | | | | | |
|---|---------------------------|----|----|--|----------------------|----|----|
| Breckenridge Reservoir | Prince William County | 35 | 40 | Graham Creek Reservoir | Amherst County | 35 | 40 |
| Briery Creek Lake | Prince Edward County | 35 | 40 | Great Creek Reservoir | Lawrenceville | 35 | 40 |
| Brunswick Lake (County Pond) | Brunswick County | 35 | 40 | Harrison Lake | Charles City County | 35 | 40 |
| Burke Lake | Fairfax County | 60 | 40 | Harwood Mills Reservoir | York County | 60 | 40 |
| Carvin Cove Reservoir | Botetourt County | 35 | 40 | Hidden Valley Lake | Washington County | 35 | 40 |
| Cherrystone Reservoir | Pittsylvania County | 35 | 40 | Hogan Lake | Pulaski County | 35 | 40 |
| Chickahominy Lake | Charles City County | 35 | 40 | Holiday Lake | Appomattox County | 35 | 40 |
| Chris Green Lake | Albemarle County | 35 | 40 | Hungry Mother Lake | Smyth County | 35 | 40 |
| Claytor Lake | Pulaski County | 25 | 20 | Hunting Run Reservoir | Spotsylvania County | 35 | 40 |
| Clifton Forge Reservoir (Smith Creek Reservoir) | Alleghany County | 35 | 20 | J. W. Flannagan Reservoir | Dickenson County | 25 | 20 |
| Coles Run Reservoir | Augusta County | 10 | 10 | Kerr Reservoir, Virginia portion (Buggs Island Lake) | Halifax County | 25 | 30 |
| Curtis Lake | Stafford County | 60 | 40 | Keysville Reservoir | Charlotte County | 35 | 40 |
| Diascund Creek Reservoir | New Kent County | 35 | 40 | Lake Albemarle | Albemarle County | 35 | 40 |
| Douthat Lake | Bath County | 25 | 20 | Lake Anna | Louisa County | 25 | 30 |
| Elkhorn Lake | Augusta County | 10 | 10 | Lake Arrowhead | Page County | 35 | 40 |
| Emporia Lake (Meherrin Reservoir) | Greensville County | 35 | 40 | Lake Burnt Mills | Isle of Wight County | 60 | 40 |
| Fairystone Lake | Henry County | 35 | 40 | Lake Chesdin | Chesterfield County | 35 | 40 |
| Falling Creek Reservoir | Chesterfield County | 35 | 40 | Lake Cohoon | Suffolk City | 60 | 40 |
| Fluvanna Ruritan Lake | Fluvanna County | 60 | 40 | Lake Conner | Halifax County | 35 | 40 |
| Fort Pickett Reservoir | Nottoway/Brunswick County | 35 | 40 | Lake Frederick | Frederick County | 35 | 40 |
| Gatewood Reservoir | Pulaski County | 35 | 40 | Lake Gaston, (Virginia portion) | Brunswick County | 25 | 30 |
| Georges Creek Reservoir | Pittsylvania County | 35 | 40 | Lake Gordon | Mecklenburg County | 35 | 40 |
| Goose Creek Reservoir | Loudoun County | 35 | 40 | Lake Keokee | Lee County | 35 | 40 |
| | | | | Lake Kilby | Suffolk City | 60 | 40 |
| | | | | Lake Lawson | Virginia Beach City | 60 | 40 |

Regulations

| | | | | | | | |
|---|-----------------------|-----------|-----------|--|------------------------|-----------|-----------|
| Lake Manassas | Prince William County | 35 | 40 | (Victoria Lake) | | | |
| Lake Meade | Suffolk City | 60 | 40 | Martinsville Reservoir (Beaver Creek Reservoir) | Henry County | 35 | 40 |
| Lake Moomaw | Bath County | 10 | 10 | Mill Creek Reservoir | Amherst County | 35 | 40 |
| Lake Nelson | Nelson County | 60 | 40 | Modest Creek Reservoir | Town of Victoria | 35 | 40 |
| Lake Nottoway (Lee Lake, Nottoway Lake) | Nottoway County | 35 | 40 | Motts Run Reservoir | Spotsylvania County | 25 | 30 |
| <u>Lake Orange</u> | <u>Orange County</u> | <u>60</u> | <u>40</u> | Mount Jackson Reservoir | Shenandoah County | 35 | 40 |
| Lake Pelham | Culpeper County | 35 | 40 | Mountain Run Lake | Culpeper County | 35 | 40 |
| Lake Prince | Suffolk City | 60 | 40 | Ni Reservoir | Spotsylvania County | 35 | 40 |
| Lake Robertson | Rockbridge County | 35 | 40 | North Fork Pound Reservoir | Wise County | 35 | 40 |
| Lake Smith | Virginia Beach City | 60 | 40 | Northeast Creek Reservoir | Louisa County | 35 | 40 |
| Lake Whitehurst | Norfolk City | 60 | 40 | Occoquan Reservoir | Fairfax County | 35 | 40 |
| Lake Wright | Norfolk City | 60 | 40 | Pedlar Lake | Amherst County | 25 | 20 |
| Lakeview Reservoir | Chesterfield County | 35 | 40 | Philpott Reservoir | Henry County | 25 | 30 |
| Laurel Bed Lake | Russell County | 35 | 40 | Phelps Creek Reservoir (Brookneal Reservoir) | Campbell County | 35 | 40 |
| Lee Hall Reservoir (Newport News Reservoir) | Newport News City | 60 | 40 | <u>Powhatan Lakes (Upper and Lower)</u> | <u>Powhatan County</u> | <u>35</u> | <u>40</u> |
| Leesville Reservoir | Bedford County | 25 | 30 | Ragged Mountain Reservoir | Albemarle County | 35 | 40 |
| Little Creek Reservoir | Virginia Beach City | 60 | 40 | Rivanna Reservoir (South Fork Rivanna Reservoir) | Albemarle County | 35 | 40 |
| Little Creek Reservoir | James City County | 25 | 30 | Roaring Fork | Pittsylvania County | 35 | 40 |
| Little River Reservoir | Montgomery County | 35 | 40 | Rural Retreat Lake | Wythe County | 35 | 40 |
| Lone Star Lake F (Crystal Lake) | Suffolk City | 60 | 40 | Sandy River Reservoir | Prince Edward County | 35 | 40 |
| Lone Star Lake G (Crane Lake) | Suffolk City | 60 | 40 | Shenandoah Lake | Rockingham County | 35 | 40 |
| Lone Star Lake I (Butler Lake) | Suffolk City | 60 | 40 | | | | |
| Lunga Reservoir | Prince William County | 35 | 40 | | | | |
| Lunenburg Beach Lake | Town of Victoria | 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 ~~water body~~ waterbody is being attained. If the

designated use of the subject ~~water body~~ waterbody is not being attained, the board shall assess the ~~water body~~ 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 ~~water body~~ 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 ~~water body~~ 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.

Part VII

Special Standards and Scenic Rivers Listings

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 ~~State~~ 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 BOD₅, total suspended solids, phosphorus, and ammonia, to protect the water quality of these high profile waterbodies.

- c. Cancelled.
- d. Cancelled.
- e. Cancelled.

Regulations

- f. Cancelled.
- 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. Cancelled.
- i. Cancelled.
- j. Cancelled.
- k. Cancelled.
- l. Cancelled.
- 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 <u>oxygen demand 5-day</u> | 6 mg/l monthly average, with not more than 5% of individual samples to exceed 8 mg/l. |
| 2. Settleable Solids <u>solids</u> | Not to exceed 0.1 ml/l monthly average. |
| 3. Suspended Solids <u>solids</u> | 5.0 mg/l monthly average, with not more than 5% of individual samples to exceed 7.5 mg/l. |
| 4. Ammonia Nitrogen <u>nitrogen</u> | Not to exceed 2.0 mg/l monthly average as N. |
| 5. Total Phosphorus <u>phosphorus</u> | 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 <u>physical</u> and Chemical <u>Constituents</u> <u>chemical</u> <u>constituents</u> | 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 Boshier 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 which are now present in the stream from natural sources and from existing discharges in the watershed.
- p. Cancelled.
- q. Cancelled.
- r. Cancelled.
- s. Cancelled.
- t. Cancelled.
- u. Maximum temperature for the New River Basin from 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. Cancelled.

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:

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

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

The default design flow for calculating steady state ~~waste load~~ 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.

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 <u>water</u> | 30 day mean ≥ 4.0 mg/l | June 1 - September 30 |
| | Instantaneous minimum ≥ 3.2 mg/l at temperatures $< 29^{\circ}\text{C}$ | |
| | Instantaneous minimum ≥ 4.3 mg/l at temperatures $\geq 29^{\circ}\text{C}$ | |

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 numerical chlorophyll a criteria apply March 1 through May 31 and July 1 through September 30 as seasonal means to the tidal James River (excludes tributaries) segments JMSTF2, JMSTF1,

JMSOH, JMSMH, JMSPH and are implemented in accordance with subsection D of 9VAC25-260-185.

| Designated Use | Chlorophyll a µ/l | Chesapeake Bay Program Segment | Temporal Application |
|---------------------------------------|-------------------|--------------------------------|--------------------------|
| Open Water <u>water</u> | 10 | JMSTF2 | March 1 - May 31 |
| | 15 | JMSTF1 | |
| | 15 | JMSOH | |
| | 12 | JMSMH | |
| | 12 | JMSPH | |
| | 15 | JMSTF2 | July 1 - September 30 |
| | 23 | JMSTF1 | |
| | 22 | JMSOH | |
| | 10 | JMSMH | |
| | 10 | JMSPH | |

cc. For Mountain Lake in Giles County, chlorophyll a shall not exceed 6 µg/L at a depth of ~~6~~ 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. ~~Reserved.~~ Maximum temperature for these seasonally stockable trout waters is 26°C and applies May 1 through October 31.

ff. ~~Reserved.~~ 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 ~~here 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.

Regulations

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 <u>Lodge Creek and its tributaries from the head of tidal waters to their headwaters.</u> <u>Mattox Creek and its tributaries from the head of tidal waters to their headwaters.</u> <u>Monroe Creek and tributaries from the head of tidal waters at Route 658 to their headwaters.</u> Pine Hill Creek and its tributaries from the confluence with Rosier Creek to their headwaters. <u>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.</u> <u>Thompson Branch and its tributaries from the head of tidal waters to their headwaters.</u> |
| 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 <u>Abel</u> 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, d | 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, d | Free flowing portions of tributaries to the Potomac River in Section 4 up to the Aquia Sanitary District Water Impoundment. |
| 4b | III | PWS,b, d | 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 <u>upstream</u> 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 below . |
| | | 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, Sycoline <u>Sycolin</u> 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 1980's) <u>1980s</u>) 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 1980's) <u>1980s</u>) raw water intake (Loudoun County) located in an old quarry to its headwaters. |

Regulations

| | | | |
|-----|-----|------------|--|
| 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 |
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| 1 | IV | pH-6.5-9.5 | 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 | 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 | 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 <u>Routes</u> 651 and 621), 3.9 miles 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 <u>Section</u> 2b). |

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| 2 | IV | EWS-12.14.15 <u>ESW-12.14.15</u> | 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). |
| | *** | pH-6.5-9.5, hh | 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 South Fork Shenandoah River (in the vicinity <u>vicinity</u> of Route 637) upstream including all named 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 in (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 <u>Shenandoah</u> 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. |

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| | 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 | 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, ESW-16 | South Fork Shenandoah River from 5 miles above the 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. |

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| 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 3.3 miles 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. |

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| | 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 33 crossing 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 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 one-half <u>0.5</u> 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 Creek 2.8 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. |

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| | 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 confluence with 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 6.9 upstream 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 |

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| | v | pH-6.5-9.5 | Mossy Creek from its confluence with the North River 7.1 miles 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 in (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. |
| | 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. |
| | 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 River upstream 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. |
| 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. |
| 6 | IV | pH-6.5-9.5 | 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 |

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| 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, hh | Mill Creek from Mount Jackson to Route 720 - 3.5 miles. |
| 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 the Shoemaker's 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 River upstream 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. |

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| | 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 | 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 Creek and 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 7 miles. |
| | 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 <u>river mile</u> 8.1 - 6.3 miles.) |

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| | 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 from Woodstock's raw water intake (approximately 4 <u>0.25</u> mile upstream of State Route 609 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 Route 722 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 points 5 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-6.5-9.5 | Little Sulfur Creek, Dan's Hollow and Horns 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 Gunns Run and its tributaries from the head of tide at river mile 2.64 to its headwaters. |

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| 1b | II | a,z | 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 its confluence with the Nansemond River to its headwaters in the Dismal Swamp. |
| | <u>VII</u> | | <u>Swamp waters in Section 1g</u> <u>Shingle Creek and its tributaries from the head of tide (approximately 500 feet downstream of Route 13/337) to their headwaters.</u> |
| 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. |
| | <u>VII</u> | | <u>Swamp waters in Section 1h</u> <u>Eley Swamp and its tributaries from Route 736 upstream to their headwaters.</u> |
| 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 above American Tobacco Company's raw water intake <u>upstream</u> . |
| 1p | III | PWS; | Free flowing tributaries to section 1o. |
| 2 | III | | Free flowing tributaries of the James River from Buoy 64 to Brandon and free flowing tributaries of the Chickahominy River to Walkers Dam, unless otherwise designated in this chapter. |
| | <u>VII</u> | | <u>Swamp waters in Section 2</u> <u>Morris Creek and its tributaries from the head of tide at river mile 5.97 upstream to its headwaters.</u> |
| 2a | III | PWS | Diascund Creek and its tributaries from Newport News' News's <u>News's</u> raw water intake dam to its headwaters. |

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| 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 <u>river mile 43.07</u> upstream to Bottoms Bridge (Route 60). |
| | | m | <u>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.</u> |
| | | 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 | <u>Stony Run and tributaries from the confluence with Chickahominy River to their headwaters.</u> |
| 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. |

9VAC25-260-415. James River Basin (Lower) (Appomattox River Subbasin).

| SEC. | CLASS | SP. STDS. | SECTION DESCRIPTION |
|------|-------|-----------|--|
| 5 | II | | Appomattox River and its tidal tributaries from its confluence with the James River to the end of tidal waters. |
| 5a | II | PWS | Appomattox River and its tidal tributaries from its mouth to 5 miles upstream of the Virginia-American Water Company's raw water intake. |
| 5b | III | PWS | Free flowing tributaries to section <u>Section 5a</u> . |
| 5c | III | | Appomattox River from the head of tidal waters, and free flowing tributaries to the Appomattox River, to their headwaters, unless otherwise designated in this chapter. |
| | VII | | Swamp waters in Section 5c |
| | | | Skinquarter Creek from its confluence with the Appomattox River upstream to river mile 5.27. Deep Creek from the confluence with Wittingham Creek downstream to the confluence of Little Creek, a distance of .54 <u>of 5.4</u> river miles. <u>Winticomack Creek from its confluence with the Appomattox River to its headwaters including unnamed tributaries at river miles 1.92, 3.15, 8.77, and 11.16.</u> |

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| 5d | III | | Swift Creek and its tributaries from the dam at Pocahontas State Park upstream to Chesterfield County's raw water impoundment dam. |
| 5e | III | PWS | Swift Creek and its tributaries from Chesterfield County's raw water impoundment dam to points 5 miles upstream. |
| 5f | III | PWS | Appomattox River and its tributaries from Appomattox River Water Authority's raw water intake located at the dam at Lake Chesdin to the headwaters of the lake. |
| | VII | | Swamp waters in Section 5f Winticomack Creek from its confluence with the Appomattox River to its headwaters including unnamed tributaries at river miles 1.92, 3.15, 8.77, and 11.16. Winterpock Creek and its tributaries (excluding Surline Branch) from its confluence with Lake Chesdin upstream to river mile 8.47. |
| 5g | III | PWS | The Appomattox River and its tributaries from Farmville's raw water intake (approximately 2.5 miles above the Route 15/45 bridge) to points 5 miles upstream. |

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. <u>Hoskins Creek and its nontidal tributaries from the head of tidal waters to their headwaters.</u> <u>Mason Mill Swamp and its tributaries from the head of tidal waters to their headwaters.</u> 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). |
| 3a | III | PWS | The Rappahannock River and its tributaries from Spotsylvania County's raw water intake near Golin Run to points 5 miles upstream (excluding Motts Run and tributaries, which is in section <u>Section 4c</u>). |
| 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 | Free flowing tributaries of the Rappahannock from Blandfield Point to its headwaters, unless otherwise designated in this chapter. |
| | VII | | Swamp waters in Section 4 <u>Goldenvale Creek from the head of tidal waters near the confluence with the Rappahannock River to its headwaters.</u> |

Regulations

- 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.

Regulations

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| 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. |
| 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. |

9VAC25-260-450. Roanoke River Basin.

| SEC. | CLASS | SP. STDS. | SECTION DESCRIPTION |
|------|-------|-----------|---|
| 1 | III | PWS | Lake Gaston and the John Kerr Reservoir in Virginia and their tributaries in Virginia, unless otherwise designated in this chapter (not including the Roanoke or the Dan Rivers). The Roanoke River Service Authority's water supply intake is in this section. |
| 1a | III | | Dockery Creek and its tributaries to their headwaters. |
| 2 | III | | Dan River and its tributaries from the John Kerr Reservoir to the Virginia-North Carolina state line just east of the Pittsylvania-Halifax County line, unless otherwise designated in this chapter. |
| 2a | III | PWS | Dan River and its tributaries from South Boston's raw water intake to points 5 miles upstream. |
| 2b | III | PWS | Banister River and its tributaries from Burlington Industries' inactive raw water intake (about 2000 feet downstream of Route 360) inclusive of the Town of Halifax intake at the Banister Lake dam upstream to the Pittsylvania-Halifax County line (designation for main stem and tributaries ends at the county line <u>line</u>). |
| 2c | | | (Deleted) |
| 2d | III | PWS | Cherrystone Creek and its tributaries from Chatham's raw water intake upstream to their headwaters. |
| 2e | III | PWS | Georges Creek from Gretna's raw water intake upstream to its headwaters. |
| 2f | III | PWS | Banister River and its tributaries from point below its confluence with Bearskin Creek (at latitude 36°46'15"; longitude 79°27'08") just east of Route 703, upstream to their headwaters. |
| 2g | III | PWS | Whitethorn Creek and its tributaries from its confluence with Georges Creek upstream to their headwaters. |

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| 3 | III | | Dan River and its tributaries from the Virginia-North Carolina state line just east of the Pittsylvania-Halifax County line upstream to the state line just east of Draper, N.C. North Carolina , unless otherwise designated in this chapter. |
| | III | PWS | Dan River and its tributaries from the Virginia-North Carolina state line just south of Danville to points 1.34 miles upstream and the first unnamed tributary to Hogans Creek from the Virginia-North Carolina state line to a point 0.45 mile upstream. |
| 3a | III | PWS | Dan River and its tributaries from the Schoolfield Dam including the City of Danville's main water intake located just upstream of the Schoolfield Dam, upstream to the Virginia-North Carolina state line. |
| 3b | IV | PWS | Cascade Creek and its tributaries. |
| 3c | IV | PWS | Smith River and its tributaries from the Virginia-North Carolina state line to, but not including, Home Creek. |
| 3d | VI | PWS | Smith River from DuPont's (inactive) raw water intake upstream to the Philpott Dam, unless otherwise designated in this chapter. |
| | VI | PWS | Natural Trout Waters in Section 3d |
| | ii | | Smith River from DuPont's (inactive) raw water intake upstream to the Philpott Dam, unless otherwise designated in this chapter. |
| 3e | IV | | Philpott Reservoir, Fairystone Lake and their tributaries. |
| | V | | Stockable Trout Waters in Section 3e |
| | v | | Otter Creek from its confluence with Rennet Bag Creek (Philpott Reservoir) to its headwaters. |
| | v | | Smith River (Philpott Reservoir portion) from the Philpott Dam (river mile 46.80) to river mile 61.14, just above the confluence with Small Creek. |
| | v | | Rennet Bag Creek from its confluence with the Smith River to the confluence of Long Branch Creek. |
| | VI | | Natural Trout Waters in Section 3e |
| | ii | | Brogan Branch from its confluence with Rennet Bag Creek upstream including all named and unnamed tributaries. |
| | ii | | Rennet Bag Creek from the confluence of Long Branch Creek upstream including all named and unnamed tributaries. |
| | ii | | Roaring Run from its confluence with Rennet Bag Creek upstream including all named and unnamed tributaries. |
| 3f | IV | PWS | North Mayo River and South Mayo River and their tributaries from the Virginia-North Carolina state line to points 5 miles upstream. |
| 3g | IV | | Interstate streams in the Dan River watershed above the point where the Dan crosses the Virginia-North Carolina state line just east of Draper, N.C. North Carolina , (including the Mayo and the Smith watersheds), unless otherwise designated in this chapter. |
| | V | | Stockable Trout Waters in Section 3g |
| | vi | | Dan River from the Virginia-North Carolina state line upstream to the Pinnacles Power House. |
| | *** | | Little Dan River from its confluence with the Dan River 7.8 miles upstream. |
| | v | | Smith River from river mile 61.14 (just below the confluence of Small Creek), to Route 704 (river mile 69.20). |

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| | VI | | Natural Trout Waters in Section 3g |
| | ii | | Dan River from Pinnacles Power House to Townes Dam. |
| | ii | | Dan River from headwaters of Townes Reservoir to Talbott Dam. |
| | iii | | Little Dan River from 7.8 miles above its confluence with the Dan River upstream including all named and unnamed tributaries. |
| | i | | North Prong of the North Fork Smith River from its confluence with the North Fork Smith River upstream including all named and unnamed tributaries. |
| | ii | | North Fork Smith River from its confluence with the Smith River upstream including all named and unnamed tributaries. |
| | iii | | Smith River from Route 704 (river mile 69.20) to Route 8 (river mile 77.55). |
| | ii | | Smith River from Route 8 (approximate river mile 77.55) upstream including all named and unnamed tributaries. |
| | ii | | South Mayo River from river mile 38.8 upstream including all named and unnamed tributaries. |
| 3h | IV | PWS | South Mayo River and its tributaries from the Town of Stuart's raw water intake 0.4 mile upstream of its confluence with the North Fork Mayo River to points 5 miles upstream. |
| | VI | | Natural Trout Waters in Section 3h |
| | iii | | Brushy Fork from its confluence with the South Mayo River upstream including all named and unnamed tributaries. |
| | iii | | Lily Cove Branch from its confluence with Rye Cove Creek upstream including all named and unnamed tributaries. |
| | iii | | Rye Cove Creek from its confluence with the South Mayo River upstream including all named and unnamed tributaries. |
| | iii | | South Mayo River from river mile 33.8 upstream including all named and unnamed tributaries. |
| 3i | IV | PWS | Hale Creek and its tributaries from the Fairy Stone State Park's raw water intake 1.7 miles from its confluence with Fairy Stone Lake upstream to its headwaters. |
| 3j | VI | PWS | Smith River and its tributaries from the Henry County Public Service Authority's raw water intake about 0.2 mile upstream of its confluence with Town Creek to points 5 miles upstream. |
| 4 | III | | Intrastate tributaries to the Dan River above the Virginia-North Carolina state line just east of Draper, North Carolina, to their headwaters, unless otherwise designated in this chapter. |
| | V | | Stockable Trout Waters in Section 4 |
| | vi | | Browns Dan River from the intersection of Routes 647 and 646 to its headwaters. |
| | vi | | Little Spencer Creek from its confluence with Spencer Creek to its headwaters. |
| | vi | | Poorhouse Creek from its confluence with North Fork South Mayo River upstream to Route 817. |
| | *** | | Rock Castle Creek from its confluence with the Smith River upstream to Route 40. |
| | VI | | Natural Trout Waters in Section 4 |

- ii Barnard Creek from its confluence with the Dan River upstream including all named and unnamed tributaries.
- ii Big Cherry Creek from its confluence with Ivy Creek upstream including all named and unnamed tributaries.
- iii Ivy Creek from its confluence with the Dan River upstream including all named and unnamed tributaries.
- iii Camp Branch from its confluence with Ivy Creek upstream including all named and unnamed tributaries.
- iii Haunted Branch from its confluence with Barnard Creek upstream including all named and unnamed tributaries.
- ii Hookers Creek from its confluence with the Little Dan River upstream including all named and unnamed tributaries.
- iii Ivy Creek from Coleman's Mill Pond upstream to Route 58 (approximately 2.5 miles).
- iii Little Ivy Creek from its confluence with Ivy Creek upstream including all named and unnamed tributaries.
- iii Little Rock Castle Creek from its confluence with Rock Castle Creek upstream including all named and unnamed tributaries.
- ii Maple Swamp Branch from its confluence with Round Meadow Creek upstream including all named and unnamed tributaries.
- iii Mayberry Creek from its confluence with Round Meadow Creek upstream including all named and unnamed tributaries.
- ii Mill Creek from its confluence with the Dan River upstream including all named and unnamed tributaries.
- iii North Fork South Mayo River from its confluence with the South Mayo River upstream including all named and unnamed tributaries.
- vi** Patrick Springs Branch from its confluence with Laurel Branch upstream including all named and unnamed tributaries.
- iii Polebridge Creek from Route 692 upstream including all named and unnamed tributaries.
- ii Poorhouse Creek from Route 817 upstream including all named and unnamed tributaries.
- ii Rhody Creek from its confluence with the South Mayo River upstream including all named and unnamed tributaries.
- iii Rich Creek from Route 58 upstream including all named and unnamed tributaries.
- ii Roaring Creek from its confluence with the Dan River upstream including all named and unnamed tributaries.
- i Rock Castle Creek from Route 40 upstream including all named and unnamed tributaries.
- iii Round Meadow Creek from its confluence with the Dan River upstream including all named and unnamed tributaries.
- ii Sawpit Branch from its confluence with Round Meadow Creek upstream including all named and unnamed tributaries.

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| | ii | | Shooting Creek from its confluence with the Smith River upstream including all named and unnamed tributaries. |
| | vi** | | Spencer Creek from Route 692 upstream including all named and unnamed tributaries. |
| | iii | | Squall Creek from its confluence with the Dan River upstream including all named and unnamed tributaries. |
| | ii | | Tuggle Creek from its confluence with the Dan River upstream including all named and unnamed tributaries. |
| | ii | | Widgeon Creek from its confluence with the Smith River upstream including all named and unnamed tributaries. |
| 4a | III | PWS | Intrastate tributaries (includes Beaver Creek, Little Beaver Creek, and Jones Creek, for the City of Martinsville) to the Smith River from DuPont's (inactive) raw water intake to points 5 miles upstream from Fieldcrest Cannon's raw water intake. |
| 4b | III | PWS | Marrowbone Creek and its tributaries from the Henry County Public Service Authority's raw water intake (about 4 <u>0.25</u> mile upstream from Route 220) to their headwaters. |
| 4c | III | PWS | Leatherwood Creek and its tributaries from the Henry County Public Service Authority's raw water intake 8 miles upstream of its confluence with the Smith River to points 5 miles upstream. |
| 5 | IV | PWS | Roanoke Staunton River from the headwaters of the John Kerr Reservoir to Leesville Dam unless otherwise designated in this chapter. |
| 5a | III | <u>PWS</u> | Tributaries to the Roanoke Staunton River from the headwaters of the John Kerr Reservoir to Leesville Dam, unless otherwise designated in this chapter. |
| | V | | Stockable Trout Waters in Section 5a |
| | vi | | Day Creek from Route 741 to its headwaters. |
| | VI | | Natural Trout Waters in Section 5a |
| | iii | | Gunstock Creek from its confluence with Overstreet Creek upstream including all named and unnamed tributaries. |
| | ii | | Overstreet Creek from its confluence with North Otter Creek upstream including all named and unnamed tributaries. |
| 5b | III | PWS | Spring Creek from Keysville's raw water intake upstream to its headwaters. |
| 5c | III | PWS | Falling River and its tributaries from a point just upstream from State Route 40 (the raw water source for Dan River, Inc.) to points 5 miles upstream and including the entire Phelps Creek watershed which contains the Brookneal Reservoir. |
| 5d | III | | Falling River and its tributaries from 5 miles above Dan River, Inc. raw water intake to its headwaters. |
| 5e | III | PWS | Reed Creek and its tributaries from Altavista's raw water intake upstream to their headwaters. |
| 5f | III | PWS | Big Otter River and its tributaries from Bedford's raw water intake to points 5 miles upstream, and Stony Creek and Little Stony Creek upstream to their headwaters. |
| | VI | PWS | Natural Trout Waters in Section 5f |
| | ii | | Little Stony Creek from 1 mile above its confluence with Stony Creek upstream including all named and unnamed tributaries. |

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| | ii | | Stony Creek from the Bedford Reservoir upstream including all named and unnamed tributaries. |
| 5g | III | | Big Otter River and its tributaries from 5 miles above Bedford's raw water intake upstream to their headwaters. |
| 5h | III | | Ash Camp Creek and that portion of Little Roanoke Creek from its confluence with Ash Camp Creek to the Route 47 bridge. |
| 5i | III | PWS | The Roanoke River and its tributaries from the Town of Altavista's raw water intake, 0.1 mile upstream from the confluence of Sycamore Creek, to points 5 miles upstream. |
| 5j | III | PWS | Big Otter River and its tributaries from the Campbell County Utilities and Service Authority's raw water intake to points 5 miles upstream. |
| 6 | IV | pH-6.5-9.5 | Roanoke River from a point (at latitude 37°15'53"; longitude 79°54'00") 5 miles above the headwaters of Smith Mountain Lake upstream to Salem's #1 raw water intake. |
| | V | | Stockable Trout Waters in Section 6 |
| | *** | pH-6.5-9.5, <u>ff</u> | Roanoke River from its junction from Routes 11 and 419 to Salem's #1 raw water intake. |
| 6a | III | NEW-1 | Tributaries of the Roanoke River from Leesville Dam to Niagra Reservoir, unless otherwise designated in this chapter. |
| | V | | Stockable Trout Waters in Section 6a |
| | vi | | Gourd Creek from 1.3 miles above its confluence with Snow Creek to its headwaters. |
| | vi | | Maggodee Creek from Boones Mill upstream to Route 862 (approximately 3.8 miles). |
| | vii | | South Fork Blackwater River from its confluence with the Blackwater River upstream to Roaring Run. |
| | vi | | South Prong Pigg River from its confluence with the Pigg River to its headwaters. |
| | VI | | Natural Trout Waters in Section 6a |
| | iii | | Daniels Branch from its confluence with the South Fork Blackwater River upstream including all named and unnamed tributaries. |
| | ii | | Green Creek from Roaring Run upstream including all named and unnamed tributaries. |
| | ii | | Pigg River from 1 mile above the confluence of the South Prong Pigg River upstream including all named and unnamed tributaries. |
| | ii | | Roaring Run from its confluence with the South Fork Blackwater River upstream including all named and unnamed tributaries. |
| 6b | | | (Deleted) |
| 6c | III | PWS | Falling Creek Reservoir and Beaverdam Reservoir. |
| 6d | IV | | Tributaries of the Roanoke River from Niagra Reservoir to Salem's #1 raw water intake, unless otherwise designated in this chapter. |
| | V | | Stockable Trout Waters in Section 6d |
| | vii | <u>ee</u> | Tinker Creek from its confluence with the Roanoke River north to Routes 11 and 220. |

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| | VI | | Natural Trout Waters in Section 6d |
| | iii | | Glade Creek from its junction with Berkley Road NE to the confluence of Coyner Branch. |
| 6e | IV | PWS | Carvin Cove Reservoir and its tributaries to their headwaters. |
| 6f | IV | PWS, NEW-1 | Blackwater River and its tributaries from the Town of Rocky Mount's raw water intake (just upstream of State Route 220) to points 5 miles upstream. |
| 6g | IV | PWS | Tinker Creek and its tributaries from the City of Roanoke's raw water intake (about 0.4 mile downstream from Glebe Mills) to points 5 miles upstream. |
| 6h | IV | PWS | Roanoke River from Leesville Dam to Smith Mountain Dam (Gap of Smith Mountain), excluding all tributaries to Leesville Lake. |
| 6i | IV | PWS, <u>NEW-1</u> | Roanoke River from Smith Mountain Dam (Gap of Smith Mountain) upstream to a point (at latitude 37°15'53"; longitude 79°54'00" and its tributaries to points 5 miles above the 795.0 foot contour (normal pool elevation) of Smith Mountain Lake. |
| 7 | IV | pH-6.5-9.5, ESW-2 | Roanoke River and its tributaries, unless otherwise designated in this chapter, from Salem's #1 raw water intake to their headwaters. |
| | V | | Stockable Trout Waters in Section 7 |
| | vi | pH-6.5-9.5 | Elliott Creek from the confluence of Rocky Branch to its headwaters. |
| | vi | pH-6.5-9.5 | Goose Creek from its confluence with the South Fork Roanoke River to its headwaters. |
| | vi | pH-6.5-9.5 | Mill Creek from its confluence with Bottom Creek to its headwaters. |
| | *** | pH-6.5-9.5 | Roanoke River from 5 miles above Salem's #2 raw water intake to the Spring Hollow Reservoir intake (see section <u>Section 7b</u>). |
| | vi | pH-6.5-9.5 | Smith Creek from its confluence with Elliott Creek to its headwaters. |
| | vi | pH-6.5-9.5 | South Fork Roanoke River from 5 miles above the Spring Hollow Reservoir intake (see section <u>Section 7b</u>) to the mouth of Bottom Creek (river mile 17.1). |
| | VI | | Natural Trout Waters in Section 7 |
| | ii | pH-6.5-9.5 | Big Laurel Creek from its confluence with Bottom Creek upstream including all named and unnamed tributaries. |
| | ii | pH-6.5-9.5 | Bottom Creek from its confluence with the South Fork Roanoke River upstream including all named and unnamed tributaries. |
| | ii | pH-6.5-9.5 | Lick Fork (Floyd County) from its confluence with Goose Creek upstream including all named and unnamed tributaries. |
| | ii | pH-6.5-9.5 | Mill Creek from its confluence with the North Fork Roanoke River upstream including all named and unnamed tributaries. |
| | iii | pH-6.5-9.5 | Purgatory Creek from Camp Alta Mons upstream including all named and unnamed tributaries. |
| | ii | pH-6.5-9.5 | Spring Branch from its confluence with the South Fork Roanoke River upstream including all named and unnamed tributaries. |
| 7a | IV | PWS pH-6.5-9.5 | Roanoke River and its tributaries from Salem's #1 raw water intake to points 5 miles upstream from Salem's #2 raw water intake. |
| | V | PWS | Stockable Trout Waters in Section 7a |

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| | *** | pH-6.5-9.5, <u>ff</u> | Roanoke River from Salem's #1 raw water intake to a point 5 miles upstream from Salem's #2 raw water intake. |
| 7b | IV | PWS pH-6.5-9.5 | Roanoke River and its tributaries from the Spring Hollow Reservoir intake upstream to points 5 miles upstream. |
| | V | PWS | Stockable Trout Waters in Section 7b |
| | *** | pH-6.5-9.5, hh <u>ff</u> | Roanoke River from the Spring Hollow Reservoir intake to the <u>Floyd</u> -Montgomery County line. |
| | vi | pH-6.5-9.5 | South Fork Roanoke River from its confluence with the Roanoke River to 5 miles above the Spring Hollow Reservoir intake. |

9VAC25-260-460. Yadkin River Basin.

| SEC. | CLASS | SP. STDS. | SECTION DESCRIPTION |
|------|-------|-----------|--|
| 1 | IV | PWS | Yadkin River Basin in Virginia including Ararat River, Johnson Creek, Little Fisher River, Lovills Creek, Pauls Creek and Stewarts Creek - the entire reach of these streams from the Virginia-North Carolina state line to their headwaters. |
| | V | PWS | Stockable Trout Waters in Section 1 |
| | *** | | Ararat River from Route 823 upstream to Route 671. |
| | vi | | Halls Branch from its confluence with Lovills Creek 4.5 miles upstream. |
| | vi | | Johnson Creek from the Virginia-North Carolina state line to its headwaters. |
| | vii | | Lovills Creek from the Virginia-North Carolina state line 1.8 miles upstream (to the Natural Resource Conservation Service dam). |
| | vii | | Pauls Creek (at the Carroll County line at Route 690) from 6.7 miles above its confluence with Stewarts Creek 4.2 miles upstream. |
| | VI | PWS | Natural Trout Waters in Section 1 |
| | iii | | Ararat River from Route 671 upstream including all named and unnamed tributaries. |
| | iii | | East Fork Johnson Creek from its confluence with Johnson Creek upstream including all named and unnamed tributaries. |
| | iii | | Elk Spur Branch from its confluence with Lovills Creek upstream including all named and unnamed tributaries. |
| | i | | Little Fisher Creek from the Virginia-North Carolina state line upstream including all named and unnamed tributaries. |
| | ii | | Little Pauls Creek in the vicinity of Route 692 (4 miles above its confluence with Pauls Creek) upstream including all named and unnamed tributaries. |
| | iii | | Lovills Creek <u>and its tributaries</u> from the <u>headwaters of the impoundment formed by the Natural Resource Conservation Service dam (1.8 miles above the Virginia-North Carolina state line) to river mile 7.8 (at the confluence of Elk Spur and Waterfall Branch) their headwaters.</u> |
| | ii | | North Fork Stewarts Creek from its confluence with Stewarts Creek upstream including all named and unnamed tributaries. |
| | ii | | Pauls Creek (Carroll County) from 10.9 miles above its confluence with Stewarts Creek upstream including all named and unnamed tributaries. |
| | i | | South Fork Stewarts Creek from its confluence with Stewarts Creek upstream including all named and unnamed tributaries. |

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- iii Stewarts Creek below Lambsburg in the vicinity of Route 696 (10.4 miles above its confluence with the Ararat River) to the confluence of the North and South Forks of Stewarts Creek.
- iii Sun Run from its confluence with the Ararat River upstream including all named and unnamed tributaries.
- iii Thompson Creek from its confluence with the Ararat River upstream including all named and unnamed tributaries.
- ii Turkey Creek from its confluence with Stewarts Creek upstream including all named and unnamed tributaries.
- ii Waterfall Branch from its confluence with Lovills Creek upstream including all named and unnamed tributaries.

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 <u>free flowing</u> 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 | | Nottoway River from the end of tidal waters to its headwaters and its free-flowing <u>free flowing</u> tributaries in Virginia, unless otherwise designated in this chapter. |
| | VII | | 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 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. Moore's and Jones Holes Swamp and tributaries from their confluence with the Nottoway River to its headwaters. |

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| | | | 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 <u>at Slagles Lake</u> . |
| 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 <u>and its tributaries</u> 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 above the raw water intake <u>upstream</u> . |
| 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 |
| | | | <u>Cattail Creek and its tributaries from its confluence with Fontaine Creek to their headwaters.</u> |
| | | | Tarrara Creek and its tributaries from its confluence with the Meherrin River to its headwaters. |
| | | | Fountains <u>Fontaine</u> 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. |

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| 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. |

9VAC25-260-510. Tennessee and Big Sandy River Basins (Holston River Subbasin).

| SEC. | CLASS | SP. STDS. | SECTION DESCRIPTION |
|------|-------|-----------|---|
| 1 | IV | | North Fork Holston River and its tributaries, unless otherwise designated in this chapter, from the Virginia-Tennessee state line to their headwaters, and those sections of Timbertree Branch and Boozy Creek in Virginia. |
| | V | | Stockable Trout Waters in Section 1 |
| | vi | | Greendale Creek from its confluence with the North Fork Holston River 4.1 miles upstream. |
| | v | | Laurel Bed Creek from its confluence with Tumbling Creek 1.8 miles upstream. |
| | vi | | Laurel Creek within the Thomas Jefferson National Forest boundaries. |
| | *** | | Laurel Creek from Route 16 to its confluence with Roaring Fork. |
| | vi | | Lick Creek (Bland County) from 5.5 miles above its confluence with the North Fork Holston River 10.9 miles upstream. |
| | vi | | Little Tumbling Creek from Tannersville upstream to where the powerline crosses the stream. |
| | vi | | Lynn Camp Creek from its confluence with Lick Creek 3.9 miles upstream. |
| | vi | | Punch and Judy Creek from its confluence with Laurel Creek 3.2 miles upstream. |
| | v | | Tumbling Creek from its confluence with the North Fork Holston River 7.1 miles upstream <u>including all named and unnamed tributaries.</u> |
| | VI | | Natural Trout Waters in Section 1 |
| | ii | | Barkcamp Branch from its confluence with Roaring Fork upstream including all named and unnamed tributaries. |
| | ii | | Beartown Branch from its confluence with Sprouts Creek upstream including all named and unnamed tributaries. |
| | ii | | Beaver Creek (Smyth County) from its confluence with the North Fork Holston River 2.8 miles upstream. |
| | *** | | Big Tumbling Creek from its confluence with the North Fork Holston River upstream including all named and unnamed tributaries. |
| | ii | | Brier Cove from its confluence with Tumbling Creek upstream including all named and unnamed tributaries. |
| | | | Brumley Creek from its confluence with the North Fork Holston River upstream <u>to the Hidden Valley Lake dam</u> including all named and unnamed tributaries. |

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| *** | | | Brumley Creek from its confluence with the North Fork Holston River (at Duncanville) 4 miles upstream. |
| iii | | | Brumley Creek from 4 miles above its confluence with the North Fork Holston River (at Duncanville) 6.9 miles upstream. |
| iii | | | Campbell Creek (Smyth County) from its confluence with the North Fork Holston River at Ellendale Ford 1 mile upstream. |
| ii | | | Coon Branch from its confluence with Barkcamp upstream including all named and unnamed tributaries. |
| ii | | | Cove Branch from its confluence with Roaring Fork upstream including all named and unnamed tributaries. |
| ii | | | Henshaw Branch from its confluence with Lick Creek upstream including all named and unnamed tributaries. |
| ii | | | Little Sprouts Creek from its confluence with Sprouts Creek upstream including all named and unnamed tributaries. |
| ii | | | Little Tumbling Creek from the powerline crossing upstream including all named and unnamed tributaries. |
| v** | | | Red Creek from its confluence with Tumbling Creek upstream including all named and unnamed tributaries. |
| ii | | | Roaring Fork (Tazewell County) from its confluence with Laurel Creek upstream including all named and unnamed tributaries. |
| ii | | | Sprouts Creek from its confluence with the North Fork Holston River upstream including all named and unnamed tributaries. |
| ii | | | Toole Creek from its confluence with the North Fork Holston River 5.9 miles upstream. |
| 1a | IV | | North Fork Holston River from the Olin Corporation downstream to the Virginia-Tennessee state line. |
| 1b | IV | PWS | Big Moccasin Creek and its tributaries from Weber City's raw water intake to points 5 miles upstream from Gate City's raw water intake. |
| 1c | | | (Deleted) |
| 1d | IV | PWS | Unnamed tributary to the North Fork Holston River from Hilton's Community No. 2 public water supply raw water intake to its headwaters. |
| 2 | IV | PWS | South Holston Lake in Virginia and South Holston Lake and its tributaries from the Bristol Virginia Utilities Board's raw water intake to points 5 miles upstream. |
| 3 | IV | | Tributaries of the South Holston Lake, and Sinking Creek and Nicely Branch in Virginia, unless otherwise designated in this chapter. |
| | V | | Stockable Trout Waters in Section 3 |
| | vi | | Berry Creek from its confluence with Fifteenmile Creek (Washington County) 2 miles upstream. |
| | vi | | Spring Creek from its confluence with the South Holston Lake to its headwaters. |
| | VI | | Natural Trout Waters in Section 3 |
| | ii | | Cox Mill Creek from its confluence with the South Fork Holston River upstream including all named and unnamed tributaries. |
| 3a | | | (Deleted) |

Regulations

- 4 IV Steel Creek and Beaver Creek and their tributaries in Virginia.
V Stockable Trout Waters in Section 4
vi Beaver Creek (Washington County) and its tributaries from the flood control dam (near Route 11) to their headwaters.
vi Sinking Creek (tributary to Paperville Creek-Washington County) from the Virginia-Tennessee state line at Bristol 3.4 miles upstream.
- 5 IV Middle Fork Holston River and its tributaries, unless otherwise designated in this chapter.
V Stockable Trout Waters in Section 5
vi Dry Run from its confluence with the Middle Fork Holston River 1.6 miles upstream.
vi Dutton Branch from its confluence with the Middle Fork Holston River 2 miles upstream.
vi Laurel Springs Creek from its confluence with the Middle Fork Holston River 2 miles upstream.
vi Middle Fork Holston River from 5 miles above Marion's raw water intake (river mile 45.83) to the headwaters.
vi Preston Hollow from 0.5 mile above its confluence with the Middle Fork Holston River 1.5 miles upstream.
vi Staley Creek from its confluence with the Middle Fork Holston River 1 mile upstream.
VI Natural Trout Waters in Section 5
iii East Fork Nicks Creek from its confluence with Nicks Creek upstream including all named and unnamed tributaries.
iii Nicks Creek within the Jefferson National Forest boundary (river mile 1.6) upstream including all named and unnamed tributaries.
iii Staley Creek from 1 mile above its confluence with the Middle Fork Holston River upstream including all named and unnamed tributaries.
- 5a IV Middle Fork Holston River and its tributaries from Edmondson Dam upstream to the Route 91 bridge.
- 5b IV Hungry Mother Creek from the dam upstream including all named and unnamed tributaries.
- 5c IV PWS Middle Fork Holston River and its tributaries from Marion's raw water intake to points 5 miles upstream, unless otherwise designated in this chapter.
V Stockable Trout Waters in Section 5c
vi Middle Fork Holston River from Marion's raw water intake at Mt. Carmel at river mile 45.83 to a point 5 miles upstream (river mile 50.83).
- 5d IV PWS Middle Fork Holston River and its tributaries from Washington County Service Authority's raw water intake to points 5 miles upstream.
- 6 IV ESW-10 South Fork Holston River and its tributaries in Virginia, unless otherwise designated in this chapter.
V Stockable Trout Waters in Section 6
vi Grosses Creek from its confluence with the South Fork Holston River 3.4 miles upstream.
vi Rush Creek (Washington County) from its confluence with the South Fork Holston River 2.2 miles upstream.
vi Straight Branch from its confluence with Whitetop Laurel Creek 2.5 miles upstream.

- VI Natural Trout Waters in Section 6
- iii Barkcamp Branch from its confluence with Rowland Creek upstream including all named and unnamed tributaries.
- iii Beaverdam Creek (Washington County) from its confluence with Laurel Creek to the Virginia-Tennessee state line 2 miles upstream.
- iii Bell Hollow from its confluence with Dickey Creek upstream including all named and unnamed tributaries.
- iii Big Branch from its confluence with Big Laurel Creek upstream including all named and unnamed tributaries.
- Big Laurel Creek (Smyth County) from its confluence with Whitetop Laurel Creek upstream including all named and unnamed tributaries.
- iii Big Laurel Creek (Smyth County) from its confluence with Whitetop Laurel Creek 2.6 miles upstream.
- ii Big Laurel Creek (Smyth County) from 2.6 miles above its confluence with Whitetop Laurel Creek (at Laurel Valley Church) upstream including all named and unnamed tributaries.
- iii Brush Creek from its confluence with Rush Creek upstream including all named and unnamed tributaries.
- iii Buckeye Branch from its confluence with Green Cove Creek upstream including all named and unnamed tributaries.
- ii Charlies Branch from its confluence with Big Laurel Creek upstream including all named and unnamed tributaries.
- iii Cold Branch from its confluence with Jerrys Creek upstream including all named and unnamed tributaries.
- iv Comers Creek from its confluence with the South Fork Holston River upstream including all named and unnamed tributaries.
- ii Cressy Creek from 1.7 miles above its confluence with the South Fork Holston River at Route 16 upstream including all named and unnamed tributaries.
- ii Daves Branch from its confluence with Big Laurel Creek upstream including all named and unnamed tributaries.
- iii Dickey Creek from 0.6 mile above its confluence with the South Fork Holston River upstream including all named and unnamed tributaries.
- ii Dry Fork from 1.2 miles above its confluence with St. Clair Creek upstream including all named and unnamed tributaries.
- ii Feathercamp Branch from its confluence with Straight Branch upstream including all named and unnamed tributaries.
- ii Grassy Branch from its confluence with Big Laurel Creek upstream including all named and unnamed tributaries.
- ii Green Cove Creek from its confluence with Whitetop Laurel Creek upstream including all named and unnamed tributaries.
- ii Grindstone Branch from its confluence with Big Laurel Creek upstream including all named and unnamed tributaries.
- iii High Trestle Branch from its confluence with Buckeye Branch upstream including all named and unnamed tributaries.

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- iii Hopkins Branch from its confluence with the South Fork Holston River upstream including all named and unnamed tributaries.
- iii Houndshell Branch from its confluence with Cressy Creek upstream including all named and unnamed tributaries.
- ii Hurricane Creek (Smyth County) from its confluence with Comers Creek upstream including all named and unnamed tributaries.
- iii Hutton Branch from its confluence with Dickey Creek upstream including all named and unnamed tributaries.
- iii Jerrys Creek (Smyth County) from 1.5 miles above its confluence with Rowland Creek upstream including all named and unnamed tributaries.
- ii Little Laurel Creek (Smyth County) from its confluence with Whitetop Laurel Creek upstream including all named and unnamed tributaries.
- *** Laurel Creek from its confluence with Beaverdam Creek (Washington County) to the Virginia-North Carolina state line.
- ii London Bridge Branch from its confluence with Beaverdam Creek (Washington County) 0.6 mile upstream.
- iii Long Branch from its confluence with Jerrys Creek upstream including all named and unnamed tributaries.
- ii Mill Creek (Washington County) from its confluence with the South Fork Holston River upstream including all named and unnamed tributaries.
- iii Parks Creek from its confluence with Cressy Creek upstream including all named and unnamed tributaries.
- ii Pennington Branch from its confluence with Whitetop Laurel Creek upstream including all named and unnamed tributaries.
- iii Quarter Branch from 1.1 miles above its confluence with Cressy Creek upstream including all named and unnamed tributaries.
- iii Raccoon Branch from its confluence with Dickey Creek upstream including all named and unnamed tributaries.
- ii Rowland Creek from 2.5 miles above its confluence with the South Fork Holston River upstream including all named and unnamed tributaries.
- ii Rush Creek (Washington County) from 2.2 miles above its confluence with the South Fork Holston River upstream including all named and unnamed tributaries.
- iii Scott Branch from its confluence with Dickey Creek upstream including all named and unnamed tributaries.
- iii Slep Creek from 2 miles above its confluence with Cressy Creek upstream including all named and unnamed tributaries.
- ii South Fork Holston River from 101.8 miles above its confluence with the Holston River to the Thomas Bridge Water Corporation's raw water intake (see ~~section~~ Section 6a).
- ii South Fork Holston River from 5 miles above the Thomas Bridge Water Corporation's raw water intake to a point 12.9 miles upstream (see ~~section~~ Section 6a).
- ii Star Hill Branch from its confluence with Green Cove Creek upstream including all named and unnamed tributaries.
- ii St. Clair Creek from 3.3 miles above its confluence with the South Fork Holston River (at Route 600) above Horseshoe Bend upstream including all named and unnamed tributaries.

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| | ii | | Sturgill Branch from its confluence with Whitetop Laurel Creek upstream including all named and unnamed tributaries. |
| | iii | | Valley Creek (Washington County) from its confluence with Whitetop Laurel Creek upstream including all named and unnamed tributaries. |
| | | | Whitetop Laurel Creek from its confluence with Laurel Creek upstream including all named and unnamed tributaries. |
| | ii | | Whitetop Laurel Creek from its confluence with Laurel Creek 8.1 miles upstream. |
| | i | | Whitetop Laurel Creek from 8.1 miles above its confluence with Laurel Creek 4.4 miles upstream. |
| | iii | | Whitetop Laurel Creek from 12.5 miles above its confluence with Laurel Creek 3.8 miles upstream. |
| 6a | IV | PWS | South Fork Holston River and its tributaries from Thomas Bridge Water Corporation's raw water intake between Route 658 and Route 656 to points 5 miles upstream. |
| | VI | | Natural Trout Waters in Section 6a |
| | ii | | South Fork Holston River from Thomas Bridge Water Corporation's raw water intake to a point 5 miles upstream. |

9VAC25-260-520. Chesapeake Bay, Atlantic Ocean and small coastal basins.

| SEC. | CLASS | SP. STDS. | SECTION DESCRIPTION |
|------|------------|-----------|---|
| 1 | I | a | The Atlantic Ocean from Cape Henry Light (Latitude 36°55'06" North; Longitude 76°00'04" West) east to the three mile limit and south to the <u>Virginia-North Carolina state line</u> . The Atlantic Ocean from Cape Henry Light to Thimble Shoal Channel (Latitude 36°57'30" North; Longitude 76°02'30" West) from Thimble Shoal Channel to Smith Island (Latitude 37°07'04" North; Longitude 75°54'04" West) and north to the Virginia-Maryland state line. |
| 1a | III | | All free flowing portions of the streams, creeks and coves in Section 1 east of the east-west divide boundary on the Eastern Shore of Virginia. |
| 1b | II | a | Tidal portions of streams, creeks and coves in Section 1 east of the east-west divide boundary on the Eastern Shore of Virginia. |
| 2 | II | a | Chesapeake Bay and its tidal tributaries from Old Point Comfort Tower (Latitude 37°00'00" North; Longitude 76°18'08" West) to Thimble Shoal Light (Latitude 37°00'09" North; Longitude 76°14'04" West) to and along the south side of Thimble Shoal Channel to its eastern end (Latitude 36°57'03" North; Longitude 76°02'03" West) to Smith Island (Latitude 37°07'04" North; Longitude 75°54'04" West) north to the <u>Virginia-Maryland border state line</u> following the east-west divide boundary on the Eastern Shore of Virginia, west along the <u>Virginia-Maryland border state line</u> , to the Virginia Coast, (Latitude 37°53'23" North; Longitude 76°14'25" West) and south following the Virginia Coast to Old Point Comfort Tower (previously described), unless otherwise designated in this chapter. |
| 2a | III | | Free flowing portions of streams lying on the Eastern Shore of Virginia west of the east-west divide boundary unless otherwise designated in this chapter. |
| 2b | III | | Drummonds Millpond including Coards Branch. |
| 2c | III | | The Virginia Department of Agriculture experimental station pond and its tributaries. |
| 2d | III | | The free flowing streams tributary to the western portion of the Chesapeake Bay lying between the Virginia-Maryland state line and Old Point Comfort. |
| | <u>VII</u> | | <u>Swamp waters in Section 2d</u> <u>Briery Swamp and tributaries from the confluence with Dragon Swamp to their headwaters.</u> <u>Contrary Swamp from the confluence with Dragon Swamp to its headwaters.</u> |

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Craney Creek from its confluence with Fox Mill Run to its headwaters.

Dragon Run and its tributaries from the confluence with Dragon Swamp to their headwaters.

Dragon Swamp and tributaries from the head of tidal waters at river mile 4.60 to their headwaters.

Exol Swamp and tributaries from the confluence with Dragon Swamp to their headwaters.

Fox Mill Run from the head of tidal waters to its headwaters.

Holmes Swamp and its tributaries from the confluence with Exol Swamp to their headwaters.

Northwest Branch Severn River from the head of tidal waters near Severn Hall Lane to its headwaters.

Timber Branch Swamp and its tributaries from the confluence with Dragon Swamp to their headwaters.

Yorkers Swamp and its tributaries from the confluence with Dragon Swamp to their headwaters.

White Marsh and its tributaries form the confluence with Dragon Swamp to their headwaters.

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| 2e | III | PWS | Harwood's Mill Reservoir (in Poquoson River's headwaters - a source of water for the City of Newport News) and its tributaries. |
| 2f | III | PWS | Brick Kiln Creek and its tributaries from Fort Monroe's raw water intake (at the Big Bethel Reservoir) to points 5 miles upstream. |
| 2g | III | PWS | Beaverdam Swamp and its tributaries (including Beaverdam Swamp Reservoir) from the Gloucester County Water System raw water intake to its headwaters. |
| 3 | II | a | Chesapeake Bay from Old Point Comfort Tower (Latitude 37°00'00" North; Longitude 76°18'08" West) to Thimble Shoal Light (Latitude 37°00'09" North; Longitude 76°14'04" West) along the south side of Thimble Shoal Channel to Cape Henry Light (Latitude 36°55'06" North; Longitude 76°00'04" West). |
| 3a | II | a,z | Little Creek from its confluence with Chesapeake Bay (Lynnhaven Roads) to end of navigable waters. |
| 3b | II | a | Tidal portions of Lynnhaven watershed from its confluence with the Chesapeake Bay (Lynnhaven Roads) to and including Lynnhaven Bay, Western Branch Lynnhaven River, Eastern Branch Lynnhaven River, Long Creek, Broad Bay and Linkhorn Bay, Thalia Creek and its tributaries to the end of tidal waters. Great Neck Creek and Little Neck Creek from their confluence with Linkhorn Bay and their tidal tributaries. Rainey Gut and Crystal Lake from their confluence with Linkhorn Bay. |
| 3c | III | | Free flowing portions of streams in Section 3b, unless otherwise designated in this chapter. |
| 3d | III | PWS | The impoundments on the Little Creek watershed including Little Creek Reservoir, Lake Smith, Lake Whitehurst, Lake Lawson, and Lake Wright. |
| 3e | II | | London Bridge Creek from its confluence with the Eastern Branch of Lynnhaven River to the end of tidal waters. Wolfsnare Creek from its confluence with the Eastern Branch Lynnhaven River to the fall line. |
| 3f | III | | Free flowing portions of London Bridge Creek and Wolfsnare Creek to the Dam Neck Road Bridge at N36°47'20.00"/W76°04'12.10" (West Neck Creek) and their free flowing tributaries. |
| 3g | III | | Lake Joyce and Lake Bradford. |

9VAC25-260-530. York River Basin.

| SEC. | CLASS | SP. STDS | SECTION DESCRIPTION |
|------|-------|----------|---|
| 1 | II | a,aa | York River and the tidal portions of its tributaries from Goodwin Neck and Sandy Point upstream to Thorofare Creek and Little Salem Creek near West Point; Mattaponi River and the tidal portions of its tributaries from Little Salem Creek to the end of tidal waters; Pamunkey River and the tidal portions of its tributaries from Thorofare Creek near West Point to the end of tidal waters. |
| 2 | III | | Free flowing tributaries of the York River, free flowing tributaries of the Mattaponi River to Clifton and the Pamunkey River to Romancoke, unless otherwise designated in this chapter. |
| 2a | III | PWS | Waller Mill Reservoir and its drainage area above Waller Mill dam which serves as a raw water supply for the City of Williamsburg. |
| 2b | III | PWS | Jones Pond (a tributary of Queen Creek near Williamsburg which serves as the raw water supply for Cheatham Annex Naval Station) and its tributaries to points 5 miles upstream. |
| 3 | III | | Free flowing portions of the Mattaponi and Pamunkey Rivers, free flowing tributaries of the Mattaponi above Clifton, and free flowing tributaries of the Pamunkey above Romancoke, unless otherwise designated in this chapter. |
| | VII | | Swamp Waters <u>waters</u> in Section 3. <u>Garnetts Creek and tributaries from the head of tidal waters upstream to include Dickeys Swamp and its tributaries.</u> Herring Creek from its headwaters at river mile 17.2 downstream to the confluence with the Mattaponi River and three named tributaries: Dorrell Creek, Fork Bridge Creek and Millpond Creek from their headwaters to their confluence with Herring Creek. <u>Hornquarter Creek from its confluence with the Pamunkey River to its headwaters.</u> <u>Jacks Creek and tributaries from the head of tidal waters to their headwaters.</u> Matadequin Creek and its tributaries, from below an unnamed tributary to Matadequin Creek at river mile 9.93 (between Rt. <u>Route</u> 350 and Sandy Valley Creek) downstream to its confluence with the Pamunkey River. Mattaponi River from its confluence with Maracossic Creek at river mile 57.17 to the head of tidal waters. Mechumps Creek from the confluence with Slayden Creek to the Pamunkey River, Slayden Creek and its tributaries to their headwaters, and Campbell Creek from the unnamed tributary at river mile 3.86 downstream to the confluence with Mechumps Creek. <u>Mehixen Creek and its tributaries from its confluence with the Pamunkey River to their headwaters.</u> <u>Monquin (Moncuin) Creek and its tributaries from the head of tidal waters to their headwaters.</u> Reedy Creek from its headwaters to its confluence with Reedy Millpond at river mile 1.06. <u>Totopotomoy Creek from its confluence with the Pamunkey River to its headwaters.</u> |
| 3a | III | PWS | South Anna River and its tributaries from Ashland's raw water intake to a point 5 miles upstream. |

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| 3b | III | PWS | Northeast Creek and its tributaries from the Louisa County Water Authority's impoundment dam (approximately 4/8 <u>0.125</u> mile upstream of Route 33) to their headwaters. |
| 3c | III | | South Anna River from Route 15 upstream to a point 1.5 miles below the effluent from the Gordonsville Sewage Treatment Plant. |
| 3d | III | PWS | Ni River and its tributaries from Spotsylvania's raw water intake near Route 627 to their headwaters. |
| 3e | III | PWS | The North Anna River and its tributaries from Hanover County's raw water intake near Doswell (approximately 4/2 <u>0.5</u> mile upstream from State Route 30) to points 5 miles upstream. |
| 3f | III | PWS | Stevens Mill Run from the Lake Caroline water impoundment, and other tributaries into the impoundment upstream to their headwaters. |

9VAC25-260-540. New River Basin.

| SEC. | CLASS | SP. STDS | SECTION DESCRIPTION |
|------|-------|----------|---|
| 1 | IV | u | New River and its tributaries, unless otherwise designated in this chapter, from the Virginia-West Virginia state line to the Montgomery-Giles County line. |
| | V | | Stockable Trout Waters in Section 1 |
| | *** | | Laurel Creek (a tributary to Wolf Creek in Bland County) from Rocky Gap to the Route 613 bridge one mile west of the junction of Routes 613 and 21. |
| | viii | | Laurel Creek (Bland County) from its confluence with Hunting Camp Creek 3.2 miles upstream. |
| | viii | | Little Wolf Creek (Bland County) from its confluence with Laurel Creek 2.6 miles upstream. |
| | v | | Sinking Creek from 5.1 miles above its confluence with the New River 10.8 miles upstream (near the Route 778 crossing). |
| | vi | | Sinking Creek from the Route 778 crossing to the Route 628 crossing. |
| | vi | | Spur Branch from its confluence with Little Walker Creek to its headwaters. |
| | v | | Walker Creek from the Route 52 bridge to its headwaters. |
| | *** | | Wolf Creek (Bland County) from Grapefield to its headwaters. |
| | VI | | Natural Trout Waters in Section 1 |
| | ii | | Bear Spring Branch from its confluence with the New River upstream including all named and unnamed tributaries. |
| | iii | | Clear Fork (Bland County) from river mile 8.5 upstream including all named and unnamed tributaries. |
| | ii | | Cove Creek (Tazewell County) from its confluence with Clear Fork upstream including all named and unnamed tributaries. |
| | ii | | Cox Branch from its confluence with Clear Fork to Tazewell's raw water intake (river mile 1.6). |
| | iii | | Ding Branch from its confluence with Nobusiness Creek upstream including all named and unnamed tributaries. |
| | ii | | Dry Fork (Bland County) from 4.8 miles above its confluence with Laurel Creek upstream including all named and unnamed tributaries. |

- ii East Fork Cove Creek (Tazewell County) from its confluence with Cove Creek upstream including all named and unnamed tributaries.
Hunting Camp Creek from its confluence with Wolf Creek upstream including all named and unnamed tributaries.
- *** Hunting Camp Creek from its confluence with Wolf Creek 8.9 miles upstream.
- iii Hunting Camp Creek from 8.9 miles above its confluence with Wolf Creek 3 miles upstream.
- ii Laurel Creek (tributary to Wolf Creek in Bland County) from Camp Laurel in the vicinity of Laurel Fork Church, upstream including all named and unnamed tributaries.
- ii Laurel Creek from a point 0.7 mile from its confluence with Sinking Creek upstream including all named and unnamed tributaries.
- ii Little Creek (Tazewell County) from 1.5 miles above its confluence with Wolf Creek above the Tazewell County Sportsmen's Club Lake upstream including all named and unnamed tributaries.
- ii Mercy Branch from its confluence with Mill Creek upstream including all named and unnamed tributaries.
- ii Mill Creek from the Narrows Town line upstream including all named and unnamed tributaries.
- ii Mudley Branch from its confluence with the West Fork Cove Creek upstream including all named and unnamed tributaries.
Nobusiness Creek from its confluence with Kimberling Creek upstream including all named and unnamed tributaries.
- *** {Nobusiness Creek from its confluence with Kimberling Creek 4.7 miles upstream.}
- iii {Nobusiness Creek from 4.7 miles above its confluence with Kimberling Creek upstream including all named and unnamed tributaries.}
- ii Oneida Branch from its confluence with the West Fork Cove Creek upstream including all named and unnamed tributaries.
- iii Panther Den Branch from its confluence with Nobusiness Creek upstream including all named and unnamed tributaries.
- ii Piney Creek from its confluence with the New River upstream including all named and unnamed tributaries.
- ii Wabash Creek from its confluence with Walker Creek upstream including all named and unnamed tributaries.
- ii West Fork Cove Creek from its confluence with Cove Creek upstream including all named and unnamed tributaries.
- 1a (Deleted)
- 1b IV u Wolf Creek and its tributaries in Virginia from its confluence with Mill Creek upstream to the Giles-Bland County line.
- 1c (Deleted)
- 1d IV u Stony Creek and its tributaries, unless otherwise designated in this chapter, from its confluence with the New River upstream to its headwaters, and Little Stony Creek and its tributaries from its confluence with the New River to its headwaters.
- V Stockable Trout Waters in Section 1d

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- vi Stony Creek (Giles County) from its confluence with the New River to its confluence with Laurel Branch.
- VI Natural Trout Waters in Section 1d
- iii Dismal Branch from its confluence with Stony Creek upstream including all named and unnamed tributaries.
- ii Dixon Branch from its confluence with North Fork Stony Creek upstream including all named and unnamed tributaries.
- ii Hemlock Branch from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.
- ii Laurel Branch from its confluence with Stony Creek upstream including all named and unnamed tributaries.
- ii Laurel Creek from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.
- ii Little Stony Creek from its confluence with the New River upstream including all named and unnamed tributaries.
- ii Maple Flats Branch from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.
- ii Meredith Branch from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.
- iii Nettle Hollow from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.
- ii North Fork Stony Creek from its confluence with Stony Creek upstream including all named and unnamed tributaries.
- iii Pine Swamp Branch from its confluence with Stony Creek upstream including all named and unnamed tributaries.
- ii Pond Drain from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.
- iii Stony Creek (Giles County) from the confluence of Laurel Branch at Olean upstream including all named and unnamed tributaries.
- ii White Rock Branch from its confluence with Stony Creek upstream including all named and unnamed tributaries.
- ii Wildcat Hollow from its confluence with Stony Creek upstream including all named and unnamed tributaries.
- 1e IV PWS,u Kimberling Creek and its tributaries from Bland Correctional Farm's raw water intake to points 5 miles upstream.
- VI PWS Natural Trout Waters in Section 1e
- iii Dismal Creek from its confluence with Kimberling Creek upstream including all named and unnamed tributaries.
- iii Pearis Thompson Branch from its confluence with Dismal Creek upstream including all named and unnamed tributaries.
- iii Standrock Branch from its confluence with Dismal Creek upstream including all named and unnamed tributaries.
- 1f (Deleted)

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| 1g | IV | u | Bluestone River and its tributaries, unless otherwise designated in this chapter, from the Virginia-West Virginia state line upstream to their headwaters. |
| 1h | IV | PWS,u | Bluestone River and its tributaries from Bluefield's raw water intake upstream to its headwaters. |
| | VI | PWS | Natural Trout Waters in Section 1h |
| | iii | | Bluestone River from a point adjacent to the Route 650/460 intersection to a point 5.7 miles upstream. |
| 1i | IV | PWS | Big Spring Branch from the Town of Pocahontas <u>Pocahontas</u> ' <u>Pocahontas</u> 's intake, from the Virginia-West Virginia state line, including the entire watershed in Abbs Valley (the Town of Pocahontas <u>Pocahontas</u> ' <u>Pocahontas</u> 's intake is located in West Virginia near the intersection of West Virginia State Route 102 and Rye Road. |
| 1j | | | (Deleted) |
| 1k | IV | PWS | Walker Creek and its tributaries from the Wythe-Bland Water and Sewer Authority's raw water intake (for Bland) to points 5 miles upstream. |
| 1l | VI ii | PWS | Cox Branch and its tributaries from Tazewell's raw water intake at the Tazewell Reservoir (river mile 1.6) to headwaters. |
| 2 | IV | v, NEW-5 | New River and its tributaries, unless otherwise designated in this chapter, from the Montgomery-Giles County line upstream to the Virginia-North Carolina state line (to include Peach Bottom Creek from its confluence with the New River to the mouth of Little Peach Bottom Creek). |
| | V | | Stockable Trout Waters in Section 2 |
| | v | | Beaverdam Creek from its confluence with the Little River to its headwaters. |
| | v | | Big Indian Creek from its confluence with the Little River to a point 7.4 miles upstream. |
| | vi | | Boyd Spring Run from its confluence with the New River to its headwaters. |
| | *** | | Brush Creek from the first bridge on Route 617 south of the junction of Routes 617 and 601 to the Floyd County line. |
| | vi | | Camp Creek from its confluence with the Little River to its headwaters. |
| | vi | | Cove Creek (Wythe County) from Route 77, 8.1 miles above its confluence with Reed Creek, 10.5 miles upstream. |
| | *** | | Dodd Creek from its confluence with the West Fork Little River to its headwaters. |
| | *** | | Dodd Creek from its confluence with the West Fork Little River 4 miles upstream. |
| | vi | | Dodd Creek from 4 miles above its confluence with the West Fork Little River to its headwaters. |
| | vi | | East Fork Stony Fork from its confluence with Stony Fork 4 miles upstream. |
| | *** | | Elk Creek from its confluence with Knob Fork Creek to the junction of State Routes 611 and 662. |
| | vi | | Gullion Fork from its confluence with Reed Creek 3.3 miles upstream. |
| | vi | | Little Brush Creek from its confluence with Brush Creek 1.9 miles upstream. |
| | vi | | Lost Bent Creek from its confluence with the Little River to its headwaters. |
| | vi | | Middle Creek from its confluence with Little River to its headwaters. |
| | vi | | Middle Fox Creek from its confluence with Fox Creek 4.1 miles upstream. |

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- vi Mill Creek (Wythe County) from its confluence with the New River 3.7 miles upstream.
- v North Fork Greasy Creek from its confluence with Greasy Creek to its headwaters.
- vi Oldfield Creek from its confluence with the Little River to its headwaters.
- vi Peach Bottom Creek from the mouth of Little Peach Bottom Creek to its headwaters.
- vi Pine Branch from its confluence with the Little River to its headwaters.
- vi Pine Creek (Carroll County) from its confluence with Big Reed Island Creek to its headwaters.
- vi Piney Fork from its confluence with Greasy Creek to its headwaters.
- vi Poor Branch from its confluence with the New River to its headwaters.
- vi Poverty Creek (Montgomery County) from its confluence with Toms Creek to its headwaters.
- vi Reed Creek (Wythe County) within the Jefferson National Forest from 57 miles above its confluence with the New River 6.8 miles upstream, unless otherwise designated in this chapter.
- vi Shady Branch from its confluence with Greasy Creek to its headwaters.
- vi Shorts Creek from 6.2 miles above its confluence with the New River in the vicinity of Route 747, 3 miles upstream.
- vi South Fork Reed Creek from river mile 6.8 (at Route 666 below Groseclose) 11.9 miles upstream.
- vi St. Lukes Fork from its confluence with Cove Creek 1.4 miles upstream.
- vi Stony Fork (Wythe County) from 1.9 miles above its confluence with Reed Creek at the intersection of Routes 600, 682, and 21/52 at Favonia 5.7 miles upstream.
- *** Toms Creek from its confluence with the New River to its headwaters.
- vi West Fork Big Indian Creek from its confluence with Big Indian Creek to its headwaters.
- vi Wolf Branch from its confluence with Poor Branch 1.2 miles upstream.
- VI Natural Trout Waters in Section 2
 - ii Baker Branch from its confluence with Cabin Creek upstream including all named and unnamed tributaries.
 - ii Baldwin Branch from 0.2 mile above its confluence with Big Horse Creek at the ~~Grayson County~~ ~~Ashe County~~ Virginia-North Carolina state line upstream including all named and unnamed tributaries.
 - ii Bear Creek (Carroll County) from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
 - iii Beaver Creek from its confluence with the Little River upstream including all named and unnamed tributaries.
 - iii Beaverdam Creek (Carroll County) from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
 - ii Big Branch from its confluence with Greasy Creek upstream including all named and unnamed tributaries.
 - iii Big Horse Creek from 12.8 miles above its confluence with the North Fork New River (above the Virginia-North Carolina state line below Whitetop) upstream including all named and unnamed tributaries.

- ii Big Indian Creek from a point 7.4 miles upstream of its confluence with the Little River upstream including all named and unnamed tributaries.
- ii Big Laurel Creek from its confluence with the Little River upstream including all named and unnamed tributaries.
- iii Big Laurel Creek from its confluence with Pine Creek upstream including all named and unnamed tributaries.
- iii Big Reed Island Creek from Route 221 upstream including all named and unnamed tributaries.
- iii Big Run from its confluence with the Little River upstream including all named and unnamed tributaries.
- Big Wilson Creek from its confluence with the New River upstream including all named and unnamed tributaries.
- *** Big Wilson Creek from its confluence with the New River 8.8 miles upstream.
- ii Big Wilson Creek from 8.8 miles above its confluence with the New River 6.6 miles upstream.
- iii Blue Spring Creek from its confluence with Cripple Creek upstream including all named and unnamed tributaries.
- ii Boothe Creek from its confluence with the Little River upstream including all named and unnamed tributaries.
- ii Bournes Branch from its confluence with Brush Creek upstream including all named and unnamed tributaries.
- iii Brannon Branch from its confluence with Burks Fork upstream including all named and unnamed tributaries.
- ii Brier Run from its confluence with Big Wilson Creek upstream including all named and unnamed tributaries.
- ii Buffalo Branch from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
- iii Burgess Creek from its confluence with Big Horse Creek upstream including all named and unnamed tributaries.
- iii Burks Fork from the Floyd-Carroll County line upstream including all named and unnamed tributaries.
- ii Byars Creek from its confluence with Whitetop Creek upstream including all named and unnamed tributaries.
- Cabin Creek from its confluence with Helton Creek upstream including all named and unnamed tributaries.
- ii Cabin Creek from its confluence with Helton Creek 3.2 miles upstream.
- i Cabin Creek from 3.2 miles above its confluence with Helton Creek upstream including all named and unnamed tributaries.
- ii Cherry Creek from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
- ii Chisholm Creek from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
- iv Crigger Creek from its confluence with Cripple Creek upstream including all named and unnamed tributaries.

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- *** Cripple Creek from the junction of the stream and U.S. Route 21 in Wythe County upstream including all named and unnamed tributaries.
- iii Crooked Creek (Carroll County) from Route 707 to Route 620.
- ii Crooked Creek from Route 620 upstream including all named and unnamed tributaries.
- iii Daniel Branch from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
- iii Dobbins Creek from its confluence with the West Fork Little River upstream including all named and unnamed tributaries.
- iv Dry Creek from 1.9 miles above its confluence with Blue Spring Creek upstream including all named and unnamed tributaries.
- iii Dry Run (Wythe County) from its confluence with Cripple Creek upstream including all named and unnamed tributaries.
- iii Earls Branch from its confluence with Beaver Creek upstream including all named and unnamed tributaries.
- iii East Fork Crooked Creek from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
- ii East Fork Dry Run from its confluence with Dry Run upstream including all named and unnamed tributaries.
- ii East Prong Furnace Creek from its confluence with Furnace Creek upstream including all named and unnamed tributaries.
- ii Elkhorn Creek from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
- ii Fox Creek from ~~its junction of the Creek and~~ with Route 734 upstream including all named and unnamed tributaries.
- iii Francis Mill Creek from its confluence with Cripple Creek upstream including all named and unnamed tributaries.
- ii Furnace Creek from its confluence with the West Fork Little River upstream including all named and unnamed tributaries.
- *** Glade Creek (Carroll County) from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
- iii Grassy Creek (Carroll County) from its confluence with Big Reed Island Creek at Route 641, upstream including all named and unnamed tributaries.
- vi** Grassy Creek (Carroll County) from its confluence with Little Reed Island Creek at Route 769, upstream including all named and unnamed tributaries.
- iii Greasy Creek from the Floyd-Carroll County line upstream including all named and unnamed tributaries.
- iii Greens Creek from its confluence with Stone Mountain Creek upstream including all named and unnamed tributaries.
- iii Guffey Creek from its confluence with Fox Creek upstream including all named and unnamed tributaries.
- ii Helton Creek from the Virginia-North Carolina state line upstream including all named and unnamed tributaries.
- ii Howell Creek from its confluence with the West Fork Little River upstream including all named and unnamed tributaries.

- ii Jerry Creek (Grayson County) from its confluence with Middle Fox Creek upstream including all named and unnamed tributaries.
- iii Jones Creek (Wythe County) from its confluence with Kinser Creek upstream including all named and unnamed tributaries.
- ii Killinger Creek from its confluence with Cripple Creek and White Rock Creek upstream including all named and unnamed tributaries.
- iii Kinser Creek from 0.4 mile above its confluence with Crigger Creek above the Mount Rogers National Forest Recreation Area Boundary at Groseclose Chapel upstream including all named and unnamed tributaries.
- iii Laurel Branch (Carroll County) from its confluence with Staunton Branch upstream including all named and unnamed tributaries.
- iii Laurel Creek (Grayson County) from its confluence with Fox Creek upstream including all named and unnamed tributaries.
- ii Laurel Fork from the Floyd-Carroll County line upstream including all named and unnamed tributaries.
- iii Laurel Fork (Carroll County) from its confluence with Big Reed Island Creek to the Floyd-Carroll County line.
- i Lewis Fork from its confluence with Fox Creek upstream including all named and unnamed tributaries.
- iii Little Cranberry Creek from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
- ii Little Helton Creek from the ~~Grayson County Ashe County~~ Virginia-North Carolina state line upstream including all named and unnamed tributaries.
- *** Little Reed Island Creek from ~~the its junction of the stream and with~~ State Routes 782 and 772 upstream including all named and unnamed tributaries, unless otherwise designated in this chapter.
- *** Little River from its junction with Route 706 upstream including all named and unnamed tributaries.
- ii Little Snake Creek from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
- ii Little Wilson Creek from its confluence with Wilson Creek (at Route 16 at Volney) upstream including all named and unnamed tributaries.
- ii Long Mountain Creek from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
- iii Meadow Creek (Floyd County) from its confluence with the Little River upstream including all named and unnamed tributaries.
- iii Meadow View Run from its confluence with Burks Fork upstream including all named and unnamed tributaries.
- iii Middle Creek from its confluence with Crigger Creek upstream including all named and unnamed tributaries.
- ii Middle Fork Helton Creek from its confluence with Helton Creek 2.2 miles upstream.
- i Middle Fork Helton Creek from 2.2 miles above its confluence with Helton Creek upstream including all named and unnamed tributaries.

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- iii Middle Fox Creek from 4.1 miles above its confluence with Fox Creek upstream including all named and unnamed tributaries.
- iii Mill Creek (Carroll County) from its confluence with Little Reed Island Creek upstream including all named and unnamed tributaries.
- ii Mill Creek (Grayson County) from its confluence with Fox Creek upstream including all named and unnamed tributaries.
- iii Mira Fork from its confluence with Greasy Creek upstream including all named and unnamed tributaries.
- ii North Branch Elk Creek from its confluence with Elk Creek upstream including all named and unnamed tributaries.
- iii North Prong Buckhorn Creek from its confluence with Buckhorn Creek upstream including all named and unnamed tributaries.
- ii Oldfield Creek from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
- ii Opossum Creek from its confluence with Fox Creek upstream including all named and unnamed tributaries.
- iii Payne Creek from its confluence with the Little River upstream including all named and unnamed tributaries.
- iii Peak Creek from 19 miles above its confluence with the New River above the Gatewood Reservoir upstream including all named and unnamed tributaries.
- iii Pine Creek (Carroll County) from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
- iii Pine Creek (Floyd County) from its confluence with Little River upstream including all named and unnamed tributaries.
- iii Pipestem Branch from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
- i Quebec Branch from its confluence with Big Wilson Creek upstream including all named and unnamed tributaries.
- iv Raccoon Branch from its confluence with White Rock Creek upstream including all named and unnamed tributaries.
- *** Reed Creek (Wythe County) from 5 miles above Wytheville's raw water intake upstream including all named and unnamed tributaries.
- ii Ripshin Creek from its confluence with Laurel Creek upstream including all named and unnamed tributaries.
- iii Road Creek (Carroll County) from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
- ii ~~Roads Road~~ Creek (Carroll County) from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
- iv Rock Creek from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
- iii Silverleaf Branch from its confluence with the Little River upstream including all named and unnamed tributaries.
- iii Snake Creek from Route 670 (3.2 miles above its confluence with Big Reed Island Creek) upstream including all named and unnamed tributaries.

- ii Solomon Branch from its confluence with Fox Creek upstream including all named and unnamed tributaries.
- vi** South Branch Elk Creek from its confluence with Elk Creek upstream including all named and unnamed tributaries.
- iii Spurlock Creek from its confluence with the West Fork Little River upstream including all named and unnamed tributaries.
- iii Staunton Branch from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
- iii Stone Mountain Creek from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
- iii Straight Branch (Carroll County) from its confluence with Greens Creek upstream including all named and unnamed tributaries.
- ii Sulphur Spring Branch from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
- iii Tory Creek from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
- iii Tract Fork from the confluence of Fortnerfield Branch upstream including all named and unnamed tributaries.
- ii Trout Branch from its confluence with Little Reed Island creek upstream including all named and unnamed tributaries.
- iii Turkey Fork from 2.6 miles above its confluence with Elk Creek upstream including all named and unnamed tributaries.
- ii Venrick Run from its confluence with Reed Creek upstream including all named and unnamed tributaries.
- iii West Fork Comers Rock Branch from its confluence with Comers Rock Branch upstream including all named and unnamed tributaries.
- iii West Fork Dodd Creek from its confluence with Dodd Creek upstream including all named and unnamed tributaries.
- iii West Fork Dry Run from its confluence with Dry Run 2 miles upstream.
- iii West Fork Little Reed Island Creek (Carroll County) from its confluence with Little Reed Island Creek upstream including all named and unnamed tributaries.
- *** West Fork Little River from its confluence with Little River upstream including all named and unnamed tributaries.
- iii West Prong Furnace Creek from its confluence with Furnace Creek upstream including all named and unnamed tributaries.
White Rock Creek from its confluence with Cripple Creek upstream including all named and unnamed tributaries.
- *** White Rock Creek from its confluence with Cripple Creek 1.9 miles upstream.
- iv White Rock Creek from 1.9 miles above its confluence with Cripple Creek upstream including all named and unnamed tributaries.
- ii Whitetop Creek from its confluence with Big Horse Creek upstream including all named and unnamed tributaries.
- i Wilburn Branch from its confluence with Big Wilson Creek upstream including all named and unnamed tributaries.

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| 2a | IV | PWS,v | New River from Radford Army Ammunition Plant's raw water intake (that intake which is the further downstream), upstream to a point 5 miles above the Blacksburg-Christiansburg, V.P.I. <u>NRV</u> Water Authority's raw water intake and including tributaries in this area to points 5 miles above the respective raw water intakes. |
| 2b | IV | PWS,v | New River from Radford's raw water intake upstream to Claytor Dam and including tributaries to points 5 miles above the intake. |
| 2c | IV | v, NEW-4 | New River and its tributaries, except Peak Creek above Interstate Route 81, from Claytor Dam to Big Reed Island Creek (Claytor Lake). |
| | V | | Stockable Trout Waters in Section 2c |
| | vi | | Chimney Branch from its confluence with Big Macks Creek to its headwaters. |
| | vi | | White Oak Camp Branch from its confluence with Chimney Branch to its headwaters. |
| | VI | | Natural Trout Waters in Section 2c |
| | ii | | Bark Camp Branch from its confluence with Big Macks Creek upstream including all named and unnamed tributaries. |
| | ii | | Big Macks Creek from Powhatan Camp upstream including all named and unnamed tributaries. |
| | iii | | Little Macks Creek from its confluence with Big Macks Creek upstream including all named and unnamed tributaries. |
| | ii | | Puncheoncamp Branch from its confluence with Big Macks Creek upstream including all named and unnamed tributaries. |
| 2d | IV | PWS,v,NEW-5 | Peak Creek and its tributaries from Pulaski's raw water intake upstream, including Hogan Branch to its headwaters and Gatewood Reservoir. |
| | V | | Stockable Trout Waters in Section 2d |
| | *** | | (West Fork) Peak Creek from the Forest Service Boundary to its headwaters. |
| 2e | | | (Deleted) |
| 2f | IV | PWS,v | Little Reed Island Creek and its tributaries from Hillsville's upstream raw water intake near Cranberry Creek to points 5 miles above Hillsville's upstream raw water intake, including the entire watershed of the East Fork Little Reed Island Creek. |
| | VI | PWS | Natural Trout Waters in Section 2f |
| | iii | | East Fork Little Reed Island Creek from its confluence with West Fork Little Reed Island Creek upstream including all named and unnamed tributaries. |
| | *** | | Little Reed Island Creek from Hillsville's upstream raw water intake to a point 5 miles upstream. |
| | iii | | Mine Branch from its confluence with the East Fork Little Reed Island Creek 2 miles upstream. |
| 2g | IV | PWS,v | Reed Creek and its tributaries from Wytheville's raw water intake to points 5 miles upstream. |
| | VI | PWS,v | Natural Trout Waters in Section 2g |
| | *** | | Reed Creek from the western town limits of Wytheville to 5 miles upstream. |
| 2h | IV | PWS,v | Chestnut Creek and its tributaries from Galax's raw water intake upstream to their headwaters or to the Virginia-North Carolina state line. |
| | VI | PWS | Natural Trout Waters in Section 2h |

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|-----|----|--------------|---|
| *** | | | Coal Creek from its confluence with Chestnut Creek upstream including all named and unnamed tributaries. |
| ii | | | East Fork Chestnut Creek (Grayson County) from its confluence with Chestnut Creek upstream including all named and unnamed tributaries. |
| iii | | | Hanks Branch from its confluence with the East Fork Chestnut Creek upstream including all named and unnamed tributaries. |
| iii | | | Linard Creek from its confluence with Hanks Branch upstream including all named and unnamed tributaries. |
| 2i | IV | | Fries Reservoir section of the New River <u>from river mile 141.36 to river mile 144.29.</u> |
| 2j | IV | PWS | Eagle Bottom Creek from Fries' <u>Fries's</u> raw water intake upstream to its headwaters. |
| 2k | IV | | Stuart Reservoir section of the New River <u>New River from Stuart Dam at N36°36'08"/W81°18'40" upstream 2.29 miles.</u> |
| 2l | IV | PWS | New River and its tributaries inclusive of the Wythe County Water Department's Austinville intake near the Route 636 bridge, and the Wythe County Water Department's Ivanhoe intake on Powder Mill Branch just upstream of the Wythe-Carroll County line to points 5 miles above the intakes. |
| | V | PWS | Stockable Trout Waters in Section 2l |
| | vi | | Powder Mill Branch (from 0.6 mile above its confluence with the New River) 2.1 miles upstream. |
| 2m | IV | PWS, NEW-4,5 | New River (Claytor Lake) from the Klopman Mills raw water intake to the Pulaski County Public Service Authority's raw water intake and tributaries to points 5 miles upstream of each intake. |
| 2n | | | (Deleted) |

VA.R. Doc. No. R13-3788; Filed June 4, 2015, 8:47 a.m.



TITLE 12. HEALTH

STATE BOARD OF HEALTH

Fast-Track Regulation

Title of Regulation: 12VAC5-67. Advance Health Care Directive Registry (amending 12VAC5-67-20, 12VAC5-67-30).

Statutory Authority: § 54.1-2995 of the Code of Virginia.

Public Hearing Information: No public hearings are scheduled.

Public Comment Deadline: July 31, 2015.

Effective Date: August 29, 2015.

Agency Contact: Debbie Condrey, Chief Information Officer, Department of Health, 109 Governor Street, Richmond, VA 23219, telephone (804) 864-7118, FAX (804) 864-7156, or email debbie.condrey@vdh.virginia.gov.

Basis: Sections 54.1-2994, 54.1-2995, and 54.1-2996 of the Code of Virginia require the State Board of Health to make available a secure online central registry for advance health care directives. Section 54.1-2995 of the Code of Virginia

directs the board to promulgate regulations to carry out the provisions of Article 9 (§ 54.1-2994 et seq.) of Chapter 29 of Title 54.1 of the Code of Virginia. Chapter 715 of the 2014 Acts of Assembly amended § 54.1-2995 to allow legal representatives to submit documents to the registry.

Purpose: To fulfill the statutory mandate to review regulations and to protect the citizens of the Commonwealth, the Virginia Department of Health conducted a periodic review of Advance Healthcare Directive Registry (12VAC5-67) pursuant to Executive Order 14 (2010). As a result of the periodic review, it was noted that the regulations had existing language preventing a physician with a patient who is incapable of communication from searching the registry to determine whether his patient has submitted an advance directive to the registry. This restriction is not required by the Code of Virginia. This regulatory action will protect the health and welfare of Virginians by ensuring that the medical wishes of individuals who have submitted an advance health care directive to the registry are honored if they are incapacitated and unable to manage their own care.

Rationale for Using Fast-Track Process: These amendments update the regulations to reflect (i) current practice and (ii)

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changes to § 54.1-2995 of the Code of Virginia pursuant to Chapter 715 of the 2014 Acts of Assembly. The department does not expect that this regulatory action will be controversial because the action simply brings the regulatory language into conformity with statutory language and current practice.

Substance: The amendments to (i) 12VAC5-67-20 add language that allows authorized representatives to submit documents to the registry and (ii) 12VAC5-67-30 remove restrictive language that would prevent a physician with a patient who is incapable of communication from searching the registry to determine whether his patient has submitted an advance directive to the registry and insert clarifying language stating physicians have the authority to query the registry for directive information of patients incapable of communication.

Issues: The primary advantages of the regulatory action are greater clarity of the regulations and allowing physicians with patients incapable of communication the ability to search the registry to determine if their patient has submitted an advance directive to the registry. There are no disadvantages to the agency, the public, or the Commonwealth.

Small Business Impact Review Report of Findings: This regulatory action serves as the report of the findings of the regulatory review pursuant to § 2.2-4007.1 of the Code of Virginia.

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulation. From § 54.1-2983 of the Code of Virginia, "Any adult capable of making an informed decision may, at any time, make a written advance directive to address any or all forms of health care in the event the declarant is later determined to be incapable of making an informed decision." Documents that may be submitted to the Advance Health Care Directive Registry (Registry) include: 1) a health care power of attorney, and 2) an advance directive. The Board of Health (Board) proposes to amend this regulation to: 1) remove restrictive language that would prevent physicians who have patients who are incapable of communication from searching the Registry to determine whether their patient has submitted an advance directive to the Registry, and 2) insert clarifying language stating that physicians have the authority to query the Registry for directive information of patients incapable of communication. Chapter 715 of the 2014 Acts of Assembly amended the Code of Virginia provisions relating to the Registry by newly allowing a legal representative or designee of the person executing the document to submit the document for filing. The Board also proposes to update this regulation to reflect that change by adding the exact statutory language allowing an authorized representative to submit documents to the Registry.

Result of Analysis. The benefits likely exceed the costs for all proposed changes.

Estimated Economic Impact. The proposal to amend regulatory language to make clear that physicians may search the Registry to see if patients who are currently incapable of communication had previously made their wishes clear through an advance directive will be beneficial in that it will increase the likelihood that patients will have their healthcare preferences followed. There is no cost associated with the proposed amendment.

Once Chapter 715 of the 2014 Acts of Assembly was enacted, authorized representatives could submit relevant documents to the Registry. Adding this language to the regulation does not change the law, but reduces the likelihood that someone who only reads the regulation is unaware of this provision. Thus this proposed amendment also is beneficial with no associated cost.

Businesses and Entities Affected. The proposed amendments affect the approximate 34,000 licensed physicians in the Commonwealth and 2,505 individuals who have submitted to the Registry.¹

Localities Particularly Affected. The proposed amendments do not disproportionately affect particular localities.

Projected Impact on Employment. The proposed amendments will not significantly affect employment.

Effects on the Use and Value of Private Property. The proposed amendments will not significantly affect the use and value of private property.

Small Businesses: Costs and Other Effects. The proposed amendments will not significantly affect costs for small businesses.

Small Businesses: Alternative Method that Minimizes Adverse Impact. The proposed amendments will not adversely affect small businesses.

Real Estate Development Costs. The proposed amendments will not affect real estate development costs.

Legal Mandate. General: The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Code of Virginia and Executive Order Number 17 (2014). Section 2.2-4007.04 requires that such economic impact analyses determine the public benefits and costs of the proposed amendments. Further the report should include but not be limited to:

- the projected number of businesses or other entities to whom the proposed regulatory action would apply,
- the identity of any localities and types of businesses or other entities particularly affected,
- the projected number of persons and employment positions to be affected,
- the projected costs to affected businesses or entities to implement or comply with the regulation, and
- the impact on the use and value of private property.

Small Businesses: If the proposed regulatory action will have an adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include:

- an identification and estimate of the number of small businesses subject to the proposed regulation,
- the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the proposed regulation, including the type of professional skills necessary for preparing required reports and other documents,
- a statement of the probable effect of the proposed regulation on affected small businesses, and
- a description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation.

Additionally, pursuant to § 2.2-4007.1, if there is a finding that a proposed regulation may have an adverse impact on small business, the Joint Commission on Administrative Rules is notified at the time the proposed regulation is submitted to the Virginia Register of Regulations for publication. This analysis shall represent DPB's best estimate for the purposes of public review and comment on the proposed regulation.

¹ Data source: Virginia Department of Health

Agency's Response to Economic Impact Analysis: The Department of Health concurs with the results of the analysis performed by the Department of Planning and Budget, specifically, the benefits likely exceed the costs for all proposed changes.

Summary:

The amendments provide that (i) physicians who have patients who are incapable of communication may search the registry to determine whether their patients have an advance directive in the registry and (ii) a legal representative may submit a document for filing in the registry.

12VAC5-67-20. Criteria for submission of an advance directive to the registry.

A. Documents that may be submitted to the registry include:

1. A health care power of attorney.
2. An advance directive created pursuant to Article 8 (§ 54.1-2981 et seq.) of Chapter 29 of Title 54.1 of the Code of Virginia or a subsequent act of the General Assembly.
3. A declaration of an anatomical gift made pursuant to the Revised Uniform Anatomical Gift Act (§ 32.1-291.1 et seq. of the Code of Virginia).

B. The document shall be submitted for filing ~~only~~ by the person who executed the document or his legal representative or designee.

C. The person submitting documents to the registry shall be responsible for payment of any fee required by the contracted vendor, public-private partnership, or any other entity through which the department has made the registry available to citizens of the Commonwealth. Fees associated with the registry shall not exceed the direct costs associated with the development and maintenance of the registry and with the education of the public about the availability of the registry.

12VAC5-67-30. Access to the registry.

The person registering documents may specify a legal representative or other persons to have access to such documents. It shall be the responsibility of the person registering to provide ~~all~~ such persons with the information necessary to access the registry. ~~In accordance with patient authorization, health care professionals may have access to the registry~~ Licensed health care providers shall have access to the registry for the purpose of a query for advance directive information on patients who are comatose, incapacitated, or otherwise mentally or physically incapable of communication.

VA.R. Doc. No. R15-3891; Filed June 5, 2015, 11:08 a.m.

Proposed Regulation

Titles of Regulations: **12VAC5-90. Regulations for Disease Reporting and Control (adding 12VAC5-90-215).**

12VAC5-120. Regulations for Testing Children for Elevated Blood-Lead Levels (repealing 12VAC5-120-10 through 12VAC5-120-90).

Statutory Authority: §§ 32.1-12, 32.1-35, and 32.1-46.1 of the Code of Virginia.

Public Hearing Information: No public hearings are scheduled.

Public Comment Deadline: August 31, 2015.

Agency Contact: Diane Woolard, Ph.D., Director, Division of Surveillance and Investigation, Department of Health, 109 Governor Street, Richmond, VA 23219, telephone (804) 864-8124, or email diane.woolard@vdh.virginia.gov.

Basis: Section 32.1-35 of the Code of Virginia directs the State Board of Health to promulgate regulations specifying which diseases occurring in the Commonwealth are to be reportable and the method by which they are to be reported. Section 32.1-46.1 of the Code of Virginia authorizes the board to establish a protocol for the identification of children with elevated blood lead levels. The State Board of Health is empowered to adopt such regulations as are necessary to carry out provisions of laws of the Commonwealth administered by the State Health Commissioner by § 32.1-12 of the Code of Virginia.

Purpose: The proposed amendment will improve the ability of the Virginia Department of Health to conduct surveillance and implement disease control for detectable blood lead levels in children. The Virginia Department of Health is proposing an amendment to the regulations in order to bring

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them into compliance with recent changes in the field of environmental disease control that are needed to protect the health of the residents of Virginia. The changes will position the agency to better detect and respond to these illnesses to protect the health of the public.

The amendments to the cancer reporting and gamete donor testing requirements that were included in the Notice of Intended Regulatory Action will not be pursued at this time.

Substance: The section on testing children to determine their blood lead levels is new to the Regulations for Disease Reporting and Control (12VAC5-90) but reflects minor amendments to existing requirements that are currently included in another set of agency regulations, 12VAC5-120. The agency decided it was a logical and efficient change to incorporate the lead testing requirements into the set of regulations that addresses the reporting of elevated blood lead levels. Having one set of regulations on this topic should reduce confusion among the regulated community.

12VAC5-120, the existing regulation pertaining to the identification of children with elevated blood lead levels, is being repealed as its content is being incorporated into 12VAC5-90. Some changes to the requirements are proposed as well. The changes simplify and clarify the requirements, remove unnecessary references to guidelines and nonmandatory actions, and reflect current Centers for Disease Control and Prevention recommendations. The proposed amendment to 12VAC5-90 pertaining to blood lead levels in children reflects a similar schedule of testing, risk factors for testing, criteria for determining low risk, and need for confirmatory testing as is currently provided in 12VAC5-120.

Issues: The primary advantages to the public will be clearer rules for testing children for exposure to lead and less confusion that is inherent in maintaining two sets of regulations pertaining to the same subject and procedures.

The primary advantages to the agency are the same as for the public. That is, elimination of the confusion caused by needing to track multiple sets of regulations or the potential for inconsistent requirements in different regulations.

No disadvantages or other pertinent matters of interest to the regulated community have been identified.

Small Business Impact Review Report of Findings: This regulatory action serves as the report of the findings of the regulatory review pursuant to § 2.2-4007.1 of the Code of Virginia.

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulation. The State Board of Health proposes to consolidate rules for testing lead levels above certain thresholds in children's blood and for reporting of cases.

Result of Analysis. The benefits likely exceed the costs for all proposed changes.

Estimated Economic Impact. Currently, there are two related regulations on testing lead levels in children's blood. One of the regulations (12VAC5-120) addresses testing for blood levels and various subsequent actions that must be taken if the lead levels are above certain thresholds. The other regulation (12VAC5-90) addresses reporting of cases if the test results are above the thresholds. This proposed action will consolidate both sets of regulations in 12VAC5-90 and will clarify the existing language. While the proposed changes also include a minor change in the lead levels that trigger subsequent action, according to VDH, the proposed levels have been followed in practice for a few years already. Since the proposed action will consolidate two separate sets of regulations under one, it will likely improve the clarity of the regulations and help the public find all of the testing and reporting requirements on this subject in one chapter. Because there will be no change in practice, no significant economic impact is anticipated.

Businesses and Entities Affected. These regulations apply primarily to physicians who diagnose and treat children. There are approximately 1,200 pediatricians and 3,300 family practitioners in Virginia.

Localities Particularly Affected. The regulations apply throughout the Commonwealth.

Projected Impact on Employment. The proposal amendments are unlikely to significantly affect employment.

Effects on the Use and Value of Private Property. The proposed amendments are unlikely to significantly affect the use and value of private property.

Small Businesses: Costs and Other Effects. The proposed amendments are unlikely to significantly affect small businesses.

Small Businesses: Alternative Method that Minimizes Adverse Impact. The proposed amendments are unlikely to adversely affect small businesses.

Real Estate Development Costs. The proposed amendments are unlikely to affect real estate development costs.

Legal Mandate. General: The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Code of Virginia and Executive Order Number 17 (2014). Section 2.2-4007.04 requires that such economic impact analyses determine the public benefits and costs of the proposed amendments. Further the report should include but not be limited to:

- the projected number of businesses or other entities to whom the proposed regulation would apply,
- the identity of any localities and types of businesses or other entities particularly affected,
- the projected number of persons and employment positions to be affected,

- the projected costs to affected businesses or entities to implement or comply with the regulation, and
- the impact on the use and value of private property.

Small Businesses: If the proposed regulation will have an adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include:

- an identification and estimate of the number of small businesses subject to the proposed regulation,
- the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the proposed regulation, including the type of professional skills necessary for preparing required reports and other documents,
- a statement of the probable effect of the proposed regulation on affected small businesses, and
- a description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation.

Additionally, pursuant to § 2.2-4007.1, if there is a finding that a proposed regulation may have an adverse impact on small business, the Joint Commission on Administrative Rules is notified at the time the proposed regulation is submitted to the Virginia Register of Regulations for publication. This analysis shall represent DPB's best estimate for the purposes of public review and comment on the proposed regulation.

Agency's Response to Economic Impact Analysis: The Virginia Department of Health concurs with the results of the analysis performed by the Department of Planning and Budget, specifically, the benefits likely exceed the costs for all proposed changes.

Summary:

The proposed amendments incorporate the testing and risk determination criteria for identifying children with elevated blood lead levels into 12VAC5-90 and repeal 12VAC5-120, the existing regulation pertaining to blood lead testing of children.

Part IX

Protocol for Identification of Children with Elevated Blood Lead Levels

12VAC5-90-215. Schedule and criteria for and confirmation of blood lead testing and information to be provided.

A. Schedule for testing. Every child shall be tested to determine the blood lead level at 12 months and 24 months of age if the health care provider determines that the child meets any of the criteria listed in subsection B of this section. Children 25 months through 72 months of age who present for medical care and meet any of criteria of subsection B of this section shall also be tested if they have either not previously been tested for blood lead level or were previously tested but experienced a change since testing that has resulted

in an increased risk of lead exposure based on the criteria listed in subsection B of this section.

B. Criteria for testing.

1. The child is eligible for or receiving benefits from Medicaid or the Special Supplemental Nutrition Program for Women, Infants and Children (WIC);
2. The child is living in or regularly visiting a house, apartment, dwelling, structure, or child care facility built before 1960;
3. The child is living in or regularly visiting a house, apartment, dwelling, structure, or child care facility built before 1978 that has (i) peeling or chipping paint or (ii) recent (within the last six months) ongoing or planned renovations;
4. The child is living in or regularly visiting a house, apartment, dwelling, or other structure in which one or more persons have blood lead testing yielding evidence of lead exposure;
5. The child is living with an adult whose job, hobby, or other activity involves exposure to lead;
6. The child is living near an active lead smelter, battery recycling plant, or other industry likely to release lead;
7. The child's parent, guardian, or other person standing in loco parentis requests the child's blood be tested due to any suspected exposure; or
8. The child is a recent refugee or immigrant or is adopted from outside of the United States.

C. Exceptions. A child who does not meet any of the schedule or criteria provided in subsection A or B of this section is considered to be at low risk, and testing is not required but may be conducted at the discretion of the health care provider. The testing requirement shall be waived if the parent, guardian, or other person standing in loco parentis of a child objects to the testing on the basis that the procedure conflicts with his religious tenets or practices.

D. Confirmation of blood lead levels. Blood lead level testing shall be performed on venous or capillary blood. Tests of venous blood performed by a laboratory certified by the federal Centers for Medicare & Medicaid Services in accordance with 42 USC § 263a, the Clinical Laboratory Improvement Amendment of 1988 (CLIA-certified), are considered confirmatory. Tests of venous blood performed by any other laboratory and tests of capillary blood shall be confirmed by a repeat blood test, preferably venous, performed by a CLIA-certified laboratory. Such confirmatory testing shall be performed in accordance with the following schedule:

1. Within one to three months if the result of the capillary test is at or above the CDC's reference value and up to 9 micrograms of lead per deciliter of whole blood (µg/dL).

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2. Within one week to one month if the result of the capillary test is 10-44 µg/dL. The higher this test result, the more urgent the need for a confirmatory test.

3. Within 48 hours if the result of the capillary test is 45-59 µg/dL.

4. Within 24 hours if the result of the capillary test is 60-69 µg/dL.

5. Immediately as an emergency laboratory test if the result of the capillary test is 70 µg/dL or higher.

E. Information to be provided. As part of regular well-check visits for all children, the health care provider shall make available to parents, guardians, or other persons standing in loco parentis information on the dangers of lead poisoning, potential sources of lead and ways to prevent exposure, and a list of available lead-related resources. When blood lead level testing is performed, the health care provider shall share the child's blood lead level test result with the child's parent, guardian, or other person standing in loco parentis and report to the local health department in accordance with the requirements of 12VAC5-90-80.

VA.R. Doc. No. R14-3897; Filed May 29, 2015, 11:44 a.m.

Final Regulation

Title of Regulation: 12VAC5-105. Rabies Regulations (adding 12VAC5-105-10 through 12VAC5-105-40).

Statutory Authority: §§ 3.2-6521 and 32.1-12 of the Code of Virginia; Chapter 834 of the 2010 Acts of Assembly.

Effective Date: July 31, 2015.

Agency Contact: Julia Murphy, DVM, State Epidemiological Veterinarian, Department of Health, 109 Governor Street, 5th Floor, Richmond, VA 23219, telephone (804) 864-8113, FAX (804) 864-8131, or email julia.murphy@vdh.virginia.gov.

Summary:

The regulation (i) establishes a procedure for issuing exemptions for rabies vaccination, (ii) requires localities to have a response plan to rabies exposure and provides a model rabies response plan for localities, and (iii) establishes requirements for recordkeeping associated with rabies clinics.

Summary of Public Comments and Agency's Response: No public comments were received by the promulgating agency.

CHAPTER 105

RABIES REGULATIONS

12VAC5-105-10. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Currently vaccinated" means the animal was (i) vaccinated by a licensed veterinarian or a licensed veterinary technician under the direct supervision of a licensed veterinarian on the premises and (ii) the animal was vaccinated and revaccinated

in accordance with the current National Association of State Public Health Veterinarian's Compendium of Animal Rabies Prevention and Control or as described on the U.S. Department of Agriculture approved vaccine label. For the purposes of rabies exposure response and § 3.2-6522 of the Code of Virginia, an animal will not be considered currently vaccinated until it has been at least 28 days since the initial vaccination and then immediately after every subsequent vaccination.

"Department" means the Virginia Department of Health.

"Rabid animal" means an animal that has had the diagnosis of rabies confirmed by the Virginia Division of Consolidated Laboratory Services, Fairfax Health Department Laboratory, Centers for Disease Control and Prevention Rabies Laboratory, or a laboratory in any state that is recognized by that state to perform rabies testing for public health purposes. Any suspected rabid animal that has exposed a companion or agricultural animal or a person and is not available for laboratory testing should be presumed to be rabid.

"Rabies exposure" or "exposed to rabies" means any circumstance where saliva or central nervous system tissue from a rabid or suspected rabid animal entered or could have entered a fresh, open wound or come in contact with a mucous membrane of a person or susceptible species of companion or agricultural animal. For the purposes of companion and agricultural animal exposure, the actual witnessing of a bite or attack by a rabid or suspected rabid animal is not necessary to define an exposure; however, a rabid or suspected rabid animal needs to have been witnessed in close proximity to the exposed animal and where, in the judgment of the local health director or his designee, it is reasonable to assume that the rabid or suspected rabid animal could have exposed the susceptible companion or agricultural animal. The department should notify the Virginia Department of Agriculture and Consumer Services when agricultural animals meet exposure criteria and coordinate exposure response with that agency. This definition notwithstanding, decisions regarding the disposition of animals housed or maintained with an agricultural animal that is diagnosed with rabies shall be at the discretion of the local health director.

"Rabies vaccination certificate" means a document provided by a licensed veterinarian or a licensed veterinary establishment indicating a specific animal has been vaccinated or revaccinated in accordance with the National Association of State Public Health Veterinarian's Compendium of Animal Rabies Prevention and Control or as described on the U.S. Department of Agriculture approved vaccine label and includes at least, but is not limited to, the following: signature of the veterinarian, the animal owner's name and address, the locality where the animal resides, the species of the animal, the sex, whether or not the animal is spayed or neutered, the age, the color, the primary breed, the certificate expiration date, and the vaccination number, also

known as the serial lot number. In lieu of individual certificates, a herd certificate can be issued for livestock other than horses that includes at least the signature of the veterinarian, the owner's name and address, the species of animal, the sex, the approximate age, the primary breed, date of vaccination, the rabies vaccine product name, the vaccination number, identifying information for each animal such as ear tag number, tattoo or other permanent identification, and the name and contact information of the veterinarian who administered the vaccine. In lieu of individual certificates, a certificate of veterinary inspection for use in shipping equine may be generated for horses that includes at least the signature of the veterinarian, the owner's name and address, the sex, the approximate age, the date of vaccination, the rabies vaccine product name, the vaccination number, identifying information for each horse such as name, color, markings, tattoo or brand, and the name and contact information for the veterinarian who administered the vaccine.

"Suspected rabid animal" means any animal that has not been tested for rabies and that the department considers to be a species at high risk for acquiring or transmitting rabies whether or not the animal is exhibiting clinical signs compatible with rabies and any animal the department considers at low risk for acquiring or transmitting rabies that is exhibiting clinical signs compatible with rabies. At the discretion of the local health director, any animal to which an observation period will be applied that may have bitten a person shall be considered a suspected rabid animal until the end of the observation period. The status of animals for which an observation period will not be applied or that the department has not identified as either high or low risk for acquiring or transmitting rabies shall be at the discretion of the local health director.

12VAC5-105-20. Rabies clinics.

The local health department (LHD) will maintain and provide upon request the following information about rabies clinics that it and the local governing body have approved within the previous 48 months:

1. Date.
2. Clinic site.
3. Name of sponsoring organization.
4. Name, address, and phone number of attending veterinarian.

12VAC5-105-30. Rabies vaccine exemptions.

A. The local health director, in consultation with the state public health veterinarian, may grant an exemption to the requirement for rabies vaccination as articulated in § 3.2-6521 of the Code of Virginia if a vaccination would likely endanger the animal's life due to a previously diagnosed disease or other previously documented medical considerations as documented by a licensed veterinarian.

B. Such exemption may be granted for an individual animal only after the veterinarian has (i) consulted with the local health director and completed and submitted to the LHD an application for exemption from rabies vaccination on a form approved by the department and (ii) submitted other documents or medical records as may be requested by the LHD. After approval of such exemption, the LHD shall issue a rabies vaccination exemption certificate, copies of which shall be provided to the veterinarian, the owner of the dog or cat exempted from rabies vaccination, and the animal control office of the municipality in which the owner of the dog or cat resides. Certification that a dog or cat is exempt from rabies vaccination may be presented in lieu of a rabies vaccination certificate for the purposes of veterinary inspection by designated local authorities and for the purposes of licensing by the locality where the animal resides. Certification that a dog or cat is exempt from rabies vaccination shall be valid for one year, after which time the animal shall be vaccinated against rabies or the application for exemption shall be renewed.

C. The governing body of any locality may require that an exempted animal be confined on the owner's property or kept on a leash, or both, or otherwise restrained if it is thought necessary to protect public health and safety. The governing body of any locality may require that a form of unique identification is associated with an exempted animal. An exempted animal shall be considered unvaccinated by the department in the event of the animal's exposure to a confirmed or suspected rabid animal. Any requirement to vaccinate an exempted animal for rabies in the event of that animal's exposure to a confirmed or suspected rabid animal shall be at the discretion of the local health director.

12VAC5-105-40. Model plan for localities.

A. Localities are required to have a rabies exposure response plan by § 3.2-6562.1 of the Code of Virginia. Pursuant to the second enactment of Chapter 834 of the 2010 Acts of Assembly, the department has developed a model plan that localities may use in part or in total to fulfill this requirement. In addition, localities may want to consider including information that will assist the plan's users with assessing rabies exposure and making post-exposure prophylactic (PEP) recommendations, communication with local authorities involved in rabies exposure response, documenting information associated with rabies exposure, and any other duties associated with response.

B. Model plan.

Title: Human and Companion Animal Rabies Exposure Protocol.

Section I. Purpose. The purpose of this plan is to:

A. Ensure the prompt capture, confinement, isolation, or euthanasia of any animal that has exposed, or poses a risk of exposing, a person or companion animal to rabies by standardizing procedures associated with investigating such incidents.

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B. Identify the authority and responsibility of the LHD, law-enforcement officers, animal control officers, and any other persons with a duty to control or respond to a risk of rabies exposure.

C. Establish consistent communication and reporting of possible rabies exposure incidents to ensure residents living in the locality receive appropriate guidance and residents and their animals receive protection against rabies infection by including them within the scope of the LHD epidemiology staff, LHD environmental health, LHD nursing staff, and locality animal control staff or any personnel acting in the capacity of a locality animal control officer and locality law enforcement. Officials who have entered into a memorandum of understanding with the LHD agree to employ standard written guidelines in response to possible human and animal rabies exposures.

D. Establish a plan to control the risk of rabies exposure and ensure prompt response to rabies-related incidents in order to minimize companion animal and human morbidity and mortality in the locality.

Section II. Locality Employees to Whom Policy Applies. This policy applies to positions assigned to the LHD environmental health staff, LHD nursing staff, LHD epidemiology staff, and any LHD or locality animal control staff employee who receives an initial report of an animal bite/possible rabies exposure. Further, this policy outlines the roles of locality animal control staff and any personnel who may be acting in the capacity of a locality animal control officer and any locality law-enforcement officials who have entered into a memorandum of understanding with the LHD for this purpose and shall herein be referred to as "locality animal control services."

Section III. Legal Authority. Authority for the local health director to develop a local authority and responsibility plan that shall provide for those within the locality with a duty to control or respond to a risk of rabies exposure and to be directed by the local health director for such purposes is articulated in § 3.2-6562.1 of the Code of Virginia (included below).

§ 3.2-6562.1. Rabies exposure; local authority and responsibility plan.

The local health director, in conjunction with the governing body of the locality, shall adopt a plan to control and respond to the risk of rabies exposure to persons and companion animals. Such plan shall set forth a procedure that promptly ensures the capture, confinement, isolation, or euthanasia of any animal that has exposed, or poses a risk of exposing, a person or companion animal to rabies. The plan shall identify the authority and responsibility of the local health department, law-enforcement officers, animal control officers, and any other persons with a duty to control or respond to a risk of rabies exposure. The plan shall provide for law-enforcement officers, animal control

officers, and other persons to report to and be directed by the local health director for such purposes.

Section IV. Maintenance. This plan is a working document. In an effort to maintain a current rabies response plan, which addresses emergent issues and changing knowledge, the plan will be reviewed and supplemented as needed as a result of lessons learned during investigations or to comply with updated guidance and legislative requirements.

Section V. Disclaimer. This plan is meant to be used as a guide. No single set of guidelines applies to all situations involving rabies or can provide all of the information needed. The contents of the plan are meant to offer a framework for response as well as support and complement appropriate, practical public health knowledge and experience.

Section VI. Responsibility of Locality Animal Control Services. As directed by the local health director, it shall be the duty of locality animal control services to capture, confine, isolate, or euthanize any animal that has exposed, or poses a risk of exposing, a person or companion animal to rabies. If such personnel is unable to capture, confine, isolate, or euthanize a companion animal that (i) is reasonably suspected to be rabid and (ii) has exposed, or poses an immediate risk of exposing, a person or companion animal to rabies, such personnel shall ensure the humane destruction of such animal.

A. Companion Animal Response. Locality animal control services shall within 24 hours of receiving information about a companion animal exposure:

1. Investigate reports of susceptible companion animals exposed to rabies.
2. Determine if the companion animal has or may have been exposed to a rabid animal, and if the companion animal is currently vaccinated.
3. Evaluate the exposure of the companion animal and prescribe the appropriate action according to state and local regulations.
4. Ensure that exposed, currently vaccinated companion animals receive a booster vaccination.
5. Notify the LHD about any unvaccinated, exposed companion animals, or exposed companion animals with an expired vaccination status in order to relay details of the exposure, vaccination history if applicable, and discussion with the owner concerning the potential options.
6. Notify the LHD about any exposed companion animals that are not dogs, cats, or ferrets.
7. Immediately notify the LHD about any illness associated with any animal in confinement or isolation.
8. Facilitate the submission of the head of any animal that may have exposed a companion animal to rabies as directed by the LHD.

9. Carry out euthanasia or humane destruction of companion animals and suspected rabid animals that may have exposed companion animals as directed by the state agency with jurisdiction over that species.

10. Submit reports associated with any companion animal exposures to the LHD.

B. Human Exposure Response. In regard to situations involving human exposure, locality animal control services shall:

1. Upon receiving information about a human exposure immediately report the exposure to the LHD by the fastest means possible.

2. Not disclose the identity of any victim of an animal bite or rabies exposure except to a health care provider or official of the LHD.

3. If possible, secure any animal that may have exposed a person, pending advice from the LHD as to how to proceed with either observation or testing.

4. Carry out euthanasia or humane destruction of companion animals and suspected rabid animals that may have exposed a person as directed by the state agency with jurisdiction over that species.

5. Facilitate the submission of the head of any animal that may have exposed a person to rabies as directed by the LHD.

Section VII. Responsibility of the LHD. As directed by the local health director, it shall be the duty of LHD environmental health staff, LHD nursing staff, and LHD epidemiology staff to respond to human and companion animal rabies exposures as detailed below. Any LHD employee who receives a report associated with a companion animal or human rabies exposure shall notify a member of the LHD environmental health staff, LHD nursing staff, or LHD epidemiology staff within 24 hours of receiving the report.

A. LHD Environmental Health Staff. [Environmental LHD environmental] health staff members are primarily responsible for the following activities in regard to companion animal and human rabies exposure response:

1. Interfacing with locality animal control services and ensuring that any animals involved in a possible rabies exposure incident are appropriately managed to control the spread of rabies viral infection.

2. Initiating contact with a human exposure victim and coordinating contact with a companion animal owner with locality animal control services when necessary by phone or site visit within two hours of receiving an exposure report.

3. Conducting a site visit to investigate a human exposure and coordinating a site visit with a companion animal owner with locality animal control services when necessary within 24 hours of the report.

4. Notifying the LHD nursing staff and the local health director within 24 hours of receiving a report of a human exposure victim.

5. Coordinating with locality animal control services to locate, and contain or retrieve animals, and collect clinical animal specimens as necessary.

6. Coordinating the submission of rabies samples to a laboratory that has been designated by the Commonwealth for rabies testing.

7. Maintaining a record of human and companion animal exposures as well as test results associated with rabies sample submissions.

8. Immediately notifying LHD nursing staff and the local health director of any positive results associated with human exposures.

9. Notifying any human exposure victims of positive results within two hours of receiving the result and [~~referring~~ referring] the victim to the LHD nursing staff in regard to PEP treatment options.

10. Coordinating with locality animal control services the notification of owners of positive results associated with exposed companion animals within 24 hours of receiving the result.

11. Coordinating with locality animal control services the response to exposed companion animals and owner follow up to evaluate the situation for any human exposures.

12. Notifying the local health director, LHD nursing staff, and LHD epidemiology staff within 24 hours of any negative results associated with rabies sample submissions.

13. Notifying the LHD epidemiology staff with 24 hours of any positive results associated with rabies sample submissions.

14. Notifying the local health director, LHD nursing staff, and locality animal control services within 24 hours of any companion animal that has been placed in isolation or confinement that is manifesting clinical signs that could be compatible with rabies.

15. Notifying locality animal control services within 24 hours of a companion animal for which rabies vaccination is required that is not vaccinated or has an expired status.

16. Developing and maintaining a human and companion animal rabies exposure communication plan that is shared with locality animal control services.

17. In coordination with the local health director, LHD nursing staff, and LHD epidemiology staff, developing and maintaining a training program that can be used to review locality rabies control and response procedures with locality animal control services on an as needed basis and/or as new staff are hired.

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B. LHD Nursing Staff. LHD nursing staff members are primarily responsible for the following activities in regard to companion animal and human rabies exposure response:

1. Ensuring that any humans involved in a possible rabies exposure incident are appropriately counseled/treated to control the risk of rabies viral infection.
2. Notifying the environmental health staff of a human or companion animal exposure within two hours of receiving a report if the report did not originate with environmental health staff.
3. Coordinating human exposure follow up with environmental health staff and assisting with human exposure assessment interviews within 24 hours of receiving a report of an exposure.
4. Coordinating the notifying of human exposure victims with environmental health staff immediately after receiving a positive test result.
5. Coordinating the notifying of human exposure victims with environmental health staff within 24 hours of receiving a negative test result.
6. Discussing PEP treatment options within the locality with human exposure victim(s).
7. Discussing medical conditions and history with human exposure victims that may affect PEP treatment.
8. Maintaining a record of medical information associated with all human exposure victims interviewed and counseled, including the exposure victim's decision concerning PEP treatment and if treatment was completed.
9. Notifying the LHD epidemiology staff when a human exposure victim initiates PEP treatment and providing any information about the situation necessary for statistical purposes.
10. Coordinating follow up with exposure victims if PEP treatment recommendations are not followed.
11. Coordinating the notification of human exposure victims with environmental health staff in regard to confinement release results within 24 hours after the confinement period.

C. [~~Locality LHD~~] Epidemiology Staff. [~~Locality LHD~~] epidemiology staff members are primarily responsible for [~~the following activities in regard to companion animal and human rabies exposure response: 1. Collecting collecting~~] and maintaining the following data in coordination/consultation with the environmental health staff and nursing staff for animal exposures/bites, animal bites to humans, and other human exposures:

- [~~2~~ 1.] Demographics of person exposed;
- [~~3~~ 2.] Information about the animal and its owner;
- [~~4~~ 3.] Details of exposure;
- [~~5~~ 4.] PEP recommendations and actions;

[~~6~~ 5.] Animal euthanasia secondary to suspect rabies; and

[~~7~~ 6.] Animal quarantine or confinement [.]

D. Local Health Director. The local health director is primarily responsible for the following activities in regard to companion animal and human rabies exposure response:

1. Developing memoranda of understanding with locality animal control services for the purpose of organizing an integrated response to human and companion animal exposures within the locality and acknowledging the need for locality animal control services to be directed by the local health director in certain rabies related situations.
2. Overseeing companion animal and human exposure response within the locality.
3. Providing medical advice and consultation in regard to human exposure victims to environmental health staff, nursing staff, and human exposure victims within the locality.
4. Providing medical advice and consultation about rabies and rabies PEP treatment with health care providers within the locality.
5. Developing a guidance document for locality animal control services that contains examples of rabies response and control situations requiring locality animal control services staff to be specifically directed by the local health director.

NOTICE: The following form used in administering the regulation was filed by the agency. The form is not being published; however, online users of this issue of the Virginia Register of Regulations may click on the name of the form with a hyperlink to access it. The form is also available from the agency contact or may be viewed at the Office of the Registrar of Regulations, General Assembly Building, 2nd Floor, Richmond, Virginia 23219.

FORMS (12VAC5-105)

[Request for Rabies Vaccination Exemption for Licensing and Inspection Purposes \(eff. 3/12\)](#)

V.A.R. Doc. No. R11-2637; Filed May 29, 2015, 11:13 a.m.

Final Regulation

Title of Regulation: 12VAC5-115. Virginia Immunization Information System (adding 12VAC5-115-10 through 12VAC5-115-80).

Statutory Authority: § 32.1-46.01 of the Code of Virginia.

Effective Date: July 31, 2015.

Agency Contact: James Farrell, Department of Health, 109 Governor Street, Richmond, VA 23219, telephone (804) 864-8055, or email james.farrell@vdh.virginia.gov.

Summary:

The regulations implement the Virginia Immunization Information System (VIIS). VIIS is a voluntary, statewide immunization registry that consolidates patient immunization histories from birth to death into a complete, accurate, and definitive record that is available to Virginia's participating health care providers. The regulations (i) define who is allowed access to VIIS; (ii) specify access requirements; (iii) ensure compatibility with current state and federal guidelines in the areas of patient data confidentiality and system security; (iv) address the security features of the application; (v) define the data to be collected; (vi) state the mechanisms for populating and capturing data; (vii) define the approved use of data, the authorized recipients of data, and the procedure for obtaining the data; and (viii) address the use of VIIS in a public health emergency.

Summary of Public Comments and Agency's Response: A summary of comments made by the public and the agency's response may be obtained from the promulgating agency or viewed at the office of the Registrar of Regulations.

CHAPTER 115**VIRGINIA IMMUNIZATION INFORMATION SYSTEM****12VAC5-115-10. Definitions.**

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Commissioner" means the State Health Commissioner or his designee.

"Data exchange" means electronically sending immunization information from an existing information system to VIIS and being able to retrieve information from VIIS.

"De-duplication" means the process in information systems that matches incoming data with existing client records and merges those identified as the same client.

"Health care entity" means any health care provider, health plan, or health care clearinghouse.

"Health care provider" means those entities listed in § 8.01-581.1 of the Code of Virginia, except that state-operated facilities shall also be considered health care providers for the purposes of this section. Health care provider shall also include all persons who are licensed, certified, registered, or permitted or who hold a multistate licensure privilege issued by any of the health regulatory boards within the Department of Health Professions, except persons regulated by the Board of Funeral Directors and Embalmers or the Board of Veterinary Medicine.

"Health plan" means an individual or group plan that provides or pays the cost of medical care and shall include any entity included in such definition as set out in 45 CFR 160.103.

"Participant" means a person or organization with a VIIS account.

"Patient" means the client who is receiving health services [or his parent or guardian].

"Public health emergency" means any (i) public health event caused by an act of bio-terrorism or vaccine-preventable disease outbreak or (ii) other public health event resulting from natural or human cause.

"Security role" means the level of security assigned to a participant that determines what information the individual may access in the application and what system functions may be performed.

"VDH" or "Department of Health" means the [~~Division of Immunization within the~~] Virginia Department of Health.

"Virginia Immunization Information System" or "VIIS" means the statewide immunization registry.

"VITA" means the Virginia Information Technologies Agency.

12VAC5-115-20. Authorized participants.

A. Health care providers, including but not necessarily limited to any physician, physician assistant, nurse practitioner, registered nurse, school nurse, pharmacist, or any entity listed in the definition of "health care provider" in § 8.01-581.1 of the Code of Virginia, are authorized to participate in VIIS.

B. Any health care entity may participate as long as it is licensed or certified in Virginia to deliver or support health care services or public health, requires immunization data to perform the health service function, and uses VIIS only for exchanging information on persons for whom it provides services.

C. Other state or regional immunization registries may exchange data with VIIS. They may share data and have access to data by contacting the VIIS program manager and complying with the registration procedure discussed in 12VAC5-115-30.

D. VDH shall give access to VIIS under the condition that having access to immunization information is required to perform the job function of the participant. The VIIS program manager or designee shall assign the security role of the participant based on his needs and job responsibilities.

E. Access to VIIS requires only Internet access and is free to participants.

12VAC5-115-30. Registration procedures.

A. Participation in VIIS is voluntary.

B. Completed registration forms from authorized participants must be processed and approved by VDH before access to the system is allowed. Registration will require the participant to assure compliance with necessary confidentiality and security access provisions that specify security procedures to ensure that VIIS data are protected

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from unauthorized view and access. The participant shall update and submit the forms to VDH every year.

C. Once the participant is approved, [the participant shall sign a participant registration agreement with VDH.] VDH will [then] provide training and activate the participant in the VIIS system.

D. Qualifying participant organizations shall designate an administrator for their organization. The administrator may then allow VIIS access by an employee in his organization and, in doing so, shall assume responsibility for registering that person, obtaining the most recent security forms that specify VITA or VDH security requirements, retaining all completed user forms, assigning the security role of the user, accepting legal responsibility for his proper use of VIIS, and terminating access to VIIS if the employee is noncompliant with VIIS requirements or no longer requires access.

E. An administrator may terminate his organization's participation at any time by notifying VDH in writing. All data entered by that organization shall remain in the system.

12VAC5-115-40. Patient confidentiality.

A. Access to VIIS information is authorized only under the condition that access to individual immunization information is required to perform the participant's job function.

B. Participants shall not conduct any activity that jeopardizes the proper function or security of VIIS. They shall use patient data only as authorized by law and this chapter and must immediately notify the patient and VDH of any breach of personal privacy or confidentiality.

C. Patients shall have the opportunity to opt-out of VIIS by doing one of the following:

1. Contacting their [~~healthcare~~ health care] provider to allow the viewing of their immunizations only by that provider who administered them; or

2. Contacting VDH in writing requesting to be taken out of VIIS and have their record no longer viewable.

D. Patient immunization records shall not be copied except for authorized use. These copies shall not be left where they are visible by unauthorized personnel and shall be shredded before disposal.

E. VIIS records shall be treated with the same confidentiality and privacy as any other [~~patient~~ health] record. Any inappropriate use of VIIS records shall result in immediate suspension of participant privileges and an investigation conducted by VDH. Additional actions may be taken pursuant to § 32.1-27 of the Code of Virginia. The VIIS program manager may reinstate privileges.

F. Nothing in this chapter alters the provision in 45 CFR Part 164 that permits covered [~~healthcare~~ health care] entities to disclose protected health information to a public health authority without individual authorization.

12VAC5-115-50. Security.

A. After VDH gives access to a VIIS participant, a secure connection is established between his browser and VIIS. The system is password protected.

B. Participants [~~must~~ shall] ensure that employees with authorized access do not disclose their user identification code or password to anyone, have physical security and password-enabled screen savers on computers accessing VIIS, make every effort to protect VIIS screens from unauthorized view, and log off the system whenever leaving the VIIS workstation.

C. The VIIS system, which is maintained on a secure website, [shall] automatically inactivate a user session after a predetermined period of inactivity. The inactivation period is determined by VITA security policy.

D. The VIIS system [~~inactivates~~ shall] inactivate user accounts, denying access to the system when participants have not logged into the system after a predetermined period of time. This inactivation period is determined by VITA security policy. The administrator must reactivate the account.

E. There shall be a secure encrypted connection between VIIS and the participating organization sending or receiving data if data exchange is performed. The encryption process will be determined by VITA or VDH or both.

12VAC5-115-60. Population of VIIS.

A. The VDH Divisions of Immunization and Vital Records have an agreement to populate demographic information in VIIS with birth certificate data. Death certificate data are used to make the VIIS record no longer viewable. Data exchange shall be performed on a periodic basis, but at least monthly.

B. Each participant shall make every effort to ensure the accuracy of all immunization and demographic information and shall include enough identifying information to allow for de-duplication of [~~clients~~ patients].

C. Data shall be reported in VIIS either by online data entry or by data exchange of files from other information systems. The [~~health-care~~ participating] provider or the [~~designated~~] health plan billed for the immunization shall report. Reporting shall occur within seven days of vaccine administration for online data entry participants. For data exchange participants, reporting shall occur within seven days of receipt of the information.

D. Both demographic and immunization data shall be reported by the participant.

1. Patient demographic information shall include, but is not limited to, patient's name, date of birth, gender, telephone number, home address, birth place, and mother's maiden name. The social security number, if provided, [~~is~~ shall be] encrypted by the application, [~~appears~~ appear] as asterisks, and [~~does~~ shall] not print out on reports for that [~~client~~ patient]. The application [~~allows~~ shall allow]

only exact matches when the social security number is used for search purposes.

2. Patient immunization information shall include, but is not limited to, the type of immunization administered using industry standards such as vaccine groups, Health Level 7 codes, or Current Procedural Terminology codes; date the immunization was administered; identity of the health care provider who administered the vaccine; manufacturer; trade name; lot number; and, if present, any contraindications or religious or medical exemptions.

E. Participants in data exchange shall provide an acceptable level of data quality, such as correct data fields, data accuracy, and enough information to correctly merge with existing [~~clients~~ patients]. Upon initial data delivery, and periodically thereafter, data shall be reviewed to determine data quality. Any rejected records shall be resolved by the participant in a timely way. VDH may suspend system privileges and [~~refer to § 32.1-27 of the Code of Virginia for take~~] additional action [in accordance with § 32.1-27 of the Code of Virginia] for any organization that submits inaccurate data.

F. If insufficient information is reported to allow de-duplication of [~~clients~~ patients], incoming data will be placed in a pending file and must be manually merged, if appropriate. All participants shall identify a contact to work with VDH on pending files.

G. VDH shall incorporate immunization data pursuant to subsection E of § 32.1-46 of the Code of Virginia into VIIS by data exchange from other immunization systems, patient care management billing systems, or information systems to the extent possible.

12VAC5-115-70. Release of VIIS data.

A. Specific patient data shall [not] be disclosed [except] to the extent required or permitted by state and federal law or regulations, after contacting VDH [~~who~~. VDH] will verify the source of the request.

B. Specific patient data may be disclosed to health care entities to the extent required or permitted by state and federal law or regulations. See [subsection E of § 32.1-46 and] § 32.1-127.1:03 of the Code of Virginia.

C. Patient data shall be erased when no longer needed [~~or due to the replacement of the computer or the resignation, retirement, or dismissal of the participant~~, when the computer is being terminated [, or in accordance with a data sharing agreement or a participant registration agreement with VDH]].

D. Aggregate data from which personal identifying data has been removed or redacted may be released for the purposes of statistical analysis, research, or reporting only after approval by VDH.

E. Any inappropriate use of VIIS data shall result in immediate suspension of user privileges and result in an investigation conducted by VDH. Additional actions may be

taken in accordance with § 32.1-27 of the Code of Virginia. The VIIS program manager may reinstate privileges upon satisfactory completion of required remedial actions and guarantee of proper use of VIIS in the future.

12VAC5-115-80. Data access in public health emergency.

A. [~~In the event of an epidemic or an outbreak of a vaccine-preventable disease or any disease of public health significance or threat, the commissioner may access VIIS in accordance with § 32.1-40 of the Code of Virginia by contacting the Division of Immunization.~~] The commissioner may [access and] release VIIS data in accordance with [§§ 32.1-40 and] 32.1-41 of the Code of Virginia.

B. The commissioner may designate additional persons to view VIIS information during a public health emergency. VDH shall contact designated authorized users, provide instruction for those who are not current participants, and activate an account.

C. The commissioner [~~, by notifying the Division of Immunization,~~] may include public health emergency announcements and notices or guidelines on the main screen that may be viewed immediately by the VIIS participants.

NOTICE: The following forms used in administering the regulation were filed by the agency. The forms are not being published; however, online users of this issue of the Virginia Register of Regulations may click on the name to access a form. The forms are also available from the agency contact or may be viewed at the Office of the Registrar of Regulations, General Assembly Building, 2nd Floor, Richmond, Virginia 23219.

FORMS (12VAC5-115)

[Administrator Information, VIISADM \(eff. 10/12\)](#)

[Electronic Data Exchange With VIIS \(eff. 10/12\)](#)

[Information Systems Security Access Agreement \(eff. 10/12\)](#)

[Organization Information, VIISORG \(eff. 10/12\)](#)

[VIIS Security Policy and User Confidentiality Agreement](#)

[Memorandum of Agreement between Virginia Department of Health/Division of Immunization \(VDH/DOI\) and VIIS Organization Interested in Data Exchange \(8/11\)](#)

[~~Virginia Immunization Information System (VIIS Opt Out-Opt In form)~~

[Virginia Immunization Information System \(VIIS\) Opt-In of VIIS \(reviewed 6/15\)](#)

[Virginia Immunization Information System \(VIIS\) Opt-Out of VIIS \(reviewed 6/15\)](#)]

[VIIS User Acknowledgement Page](#)

[VIIS User Signature Page](#)

VA.R. Doc. No. R09-1776; Filed May 29, 2015, 11:12 a.m.

Regulations

Fast-Track Regulation

Title of Regulation: 12VAC5-218. Rules and Regulations Governing Outpatient Health Data Reporting (amending 12VAC5-218-10, 12VAC5-218-20, 12VAC5-218-40, 12VAC5-218-50; adding 12VAC5-218-25; repealing 12VAC5-218-30).

Statutory Authority: §§ 32.1-12 and 32.1-276.6 of the Code of Virginia.

Public Hearing Information: No public hearings are scheduled.

Public Comment Deadline: July 31, 2015.

Effective Date: August 29, 2015.

Agency Contact: Debbie Condrey, Chief Information Officer, Department of Health, 109 Governor Street, Richmond, VA 23219, telephone (804) 864-7118, or email debbie.condrey@vdh.virginia.gov.

Basis: The regulation is promulgated under the authority of §§ 32.1-12 and 32.17-276.6 of the Code of Virginia. Section 32.1-12 grants the board the legal authority to make, adopt, promulgate, and enforce regulations necessary to carry out the provisions of Title 32.1 of the Code of Virginia. Section 32.1-276.6 requires the board to promulgate regulations specifying the format for submission of the outpatient data elements that facilities are mandated to submit to the board.

Purpose: To fulfill the statutory mandate to review regulations and to protect the citizens of the Commonwealth, the Virginia Department of Health conducted a periodic review of Rules and Regulations Governing Outpatient Health Data Reporting (12VAC5-218) pursuant to Executive Order 14 (2010). As a result of this review, the department determined it was necessary to use the regulatory process to amend these regulations to make corrections to outdated citations and to enhance the clarity of the regulations in order to achieve improvements that will be reasonable and prudent and will not impose an unnecessary burden on the agency or the public.

Rationale for Using Fast-Track Process: These amendments simply update the regulations to reflect current practice. The department does not expect that this regulatory action will be controversial.

Substance: The amendments:

1. Correct three definitions and remove two unnecessary definitions in 12VAC5-218-10.
2. Remove outdated citations, specify the format of reporting requirements, update the data elements that are required to be reported due to statutory changes, and update references to publications from the National Uniform Billing Committee and the Centers for Medicare and Medicaid Services in 12VAC5-218-20.
3. Add 12VAC5-218-25 to include the requirements previously listed in the definition of "outpatient processed verified data." The definition had numerous

substantive requirements that were not appropriate to be located in the definitions section.

4. Repeal 12VAC5-218-30.

5. Update for clarity the language in 12VAC5-218-40 and 12VAC5-218-50.

Issues: The purpose of the proposed regulatory action is to comply with the Code of Virginia and to remove outdated citations and update language that no longer reflects current practice. There are no known disadvantages to the public, the regulated entities, business entities or the Commonwealth. The advantage will be greater clarity of the regulations.

Small Business Impact Review Report of Findings: This regulatory action serves as the report of the findings of the regulatory review pursuant to § 2.2-4007.1 of the Code of Virginia.

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulation. The Board of Health (Board) proposes to: 1) update definitions and references, 2) repeal obsolete language, 3) amend language for clarity, and 4) establish existing policy in this regulation.

Result of Analysis. The benefits likely exceed the costs for all proposed changes.

Estimated Economic Impact. Updating definitions and references, repealing obsolete language, and amending language to improve clarity are all moderately beneficial in that they may reduce some potential confusion amongst the interested public. General hospitals, ordinary hospitals, outpatient surgical hospitals, and other facilities licensed or certified pursuant to Article 1 (§ 32.1-123 et seq.) of Chapter 5 of Title 32.1 of the Code of Virginia, are required to submit outpatient level data either to the Board or to the nonprofit organization Virginia Health Information on behalf of the Board. Physicians performing surgical procedures in their offices or oral and maxillofacial surgeon's office as defined by § 32.1-276.3 of the Code of Virginia are also required to submit outpatient level data. If the submitted data has not already been processed and verified, then fees may be charged. It is current Board policy that the fees not exceed \$.75 per record and that no fees are charged to state agencies reporting data. The Board proposes to specify in this regulation that the fees shall not exceed \$.75 per record and that no fees are charged to state agencies reporting data. Establishing this policy in regulation does not change what occurs in practice, but does provide a modest benefit in that it provides clarity for interested parties.

Businesses and Entities Affected. The proposed amendments concern approximately 150 licensed or certified facilities performing outpatient surgical procedures across the Commonwealth, as well as the nonprofit organization Virginia Health Information.

Localities Particularly Affected. The proposed amendments do not disproportionately affect particular localities.

Projected Impact on Employment. The proposed amendments are unlikely to significantly affect employment.

Effects on the Use and Value of Private Property. The proposed amendments will not significantly affect the use and value of private property.

Small Businesses: Costs and Other Effects. The proposed amendments will not significantly affect costs for small businesses.

Small Businesses: Alternative Method that Minimizes Adverse Impact. The proposed amendments will not adversely affect small businesses.

Real Estate Development Costs. The proposed amendments are unlikely to affect real estate development costs.

Legal Mandate. General: The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Code of Virginia and Executive Order Number 17 (2014). Section 2.2-4007.04 requires that such economic impact analyses determine the public benefits and costs of the proposed amendments. Further the report should include but not be limited to:

- the projected number of businesses or other entities to whom the proposed regulatory action would apply,
- the identity of any localities and types of businesses or other entities particularly affected,
- the projected number of persons and employment positions to be affected,
- the projected costs to affected businesses or entities to implement or comply with the regulation, and
- the impact on the use and value of private property.

Small Businesses: If the proposed regulatory action will have an adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include:

- an identification and estimate of the number of small businesses subject to the proposed regulation,
- the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the proposed regulation, including the type of professional skills necessary for preparing required reports and other documents,
- a statement of the probable effect of the proposed regulation on affected small businesses, and
- a description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation.

Additionally, pursuant to § 2.2-4007.1, if there is a finding that a proposed regulation may have an adverse impact on small business, the Joint Commission on Administrative Rules is notified at the time the proposed regulation is submitted to the Virginia Register of Regulations for publication. This analysis shall represent DPB's best estimate for the purposes of public review and comment on the proposed regulation.

Agency's Response to Economic Impact Analysis: The Department of Health concurs with the results of the analysis performed by the Department of Planning and Budget, specifically, the benefits likely exceed the costs for all proposed changes.

Summary:

The amendments clarify provisions by (i) updating definitions and references, (ii) repealing obsolete language, (iii) separating requirements for outpatient processed verified data out of the definition for that term, and (iv) establishing existing policy regarding fees for reporting data in the regulation.

12VAC5-218-10. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Board" means the State Board of Health.

~~"Inpatient hospital" means a hospital providing inpatient care and licensed pursuant to Article 1 (§ 32.1-123 et seq.) of Chapter 5 of Title 32.1 of the Code of Virginia, a hospital licensed pursuant to Chapter 8 (§ 37.1-179 et seq.) of Title 37.1 of the Code of Virginia, a hospital operated by the Department of Mental Health, Mental Retardation and Substance Abuse Services for the care and treatment of the mentally ill, or a hospital operated by the University of Virginia or Virginia Commonwealth University Health System Authority.~~

"Nonprofit organization" means a nonprofit, tax-exempt health data organization with the characteristics, expertise and capacity to execute the powers and duties set forth for such entity in Chapter 7.2 (§ 32.1-276.2 et seq.) of Title 32.1 of the Code of Virginia and with which the Commissioner of Health has entered into a contract as required by the Code of Virginia.

"Outpatient processed, verified data" means data on outpatient records that ~~have been subjected to edits~~ fulfill the requirements specified in 12VAC5-218-25. These edits shall be applied to data elements that are on the UB 92 Billing Form, HCFA 1500 Billing Form or a nationally adopted successor billing form used by reporting entities. The edits shall have been agreed to by the board and the nonprofit organization. Outpatient records containing invalid UB 92 codes, HCFA 1500 codes, another nationally adopted billing form codes or all blank fields for any of the data elements subjected to edits shall be designated as error records. To be

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~~considered processed and verified, a complete filing of outpatient surgical procedures specified by the board submitted by a reporting entity in aggregate per calendar year quarter and that are subjected to these edits must be free of error at a prescribed rate. The overall error rate shall not exceed 5.0%. A separate error rate shall be calculated for patient identifier, and it shall not exceed 5.0%. The error rate shall be calculated on only those fields approved by the board through the process specified in 12VAC5-218-20.~~

"Outpatient surgery" surgical procedures" means all surgical procedures performed on an outpatient basis in a general hospital, ordinary hospital, outpatient surgical hospital or other facility licensed or certified pursuant to Article 1 (§ 32.1-123 et seq.) of Chapter 5 of Title 32.1 of the Code of Virginia or in a physician's office or oral and maxillofacial surgeon's office as defined by § 32.1-276.3 of the Code of Virginia. Outpatient surgery refers only to those surgical procedure groups on which data are collected by the nonprofit organization as a part of a pilot study.

"Physician" means a person licensed to practice medicine or osteopathy in the Commonwealth pursuant to Chapter 29 (§ 54.1-2900 et seq.) of Title 54.1 of the Code of Virginia.

"Physician's office" means a place (i) owned or operated by a licensed physician or group of physicians practicing in any legal form whatsoever or by a corporation, partnership, limited liability company or other entity that employs or engages physicians and (ii) designed and equipped solely for the provision of fundamental medical care, whether diagnostic, therapeutic, rehabilitative, preventive or palliative, to ambulatory patients.

"Reporting entity" means every general hospital, ordinary hospital, outpatient surgical hospital or other facility licensed or certified pursuant to Article 1 (§ 32.1-123 et seq.) of Chapter 5 of Title 32.1 of the Code of Virginia and every physician performing surgical procedures in his office or oral and maxillofacial surgeon's office as defined by § 32.1-276.3 of the Code of Virginia.

"Surgical procedure group" means at least five procedure groups, identified by the nonprofit organization designated pursuant to § 32.1-276.4 of the Code of Virginia in compliance with regulations adopted by the board, based on criteria that include, but are not limited to, the frequency with which the procedure is performed, the clinical severity or intensity, and the perception or probability of risk. The nonprofit organization shall form a technical advisory group consisting of members nominated by its board of directors' nominating organizations to assist in selecting surgical procedure groups to recommend to the board for adoption.

~~"System" means the Virginia Patient Level Data System.~~

12VAC5-218-20. Reporting requirements for outpatient data elements.

Every reporting entity performing outpatient surgical procedures shall submit each patient level data element listed

below in the table in this section for each patient for which an outpatient surgical procedure is performed and for which the data element is collected on the standard claim form utilized by the reporting entity. Most of these data elements are currently collected from a UB-92 Billing Form or HCFA-1500 Form. In the table below, the column for a field description indicates where the data element is located on the UB-92 and HCFA-1500 forms. An asterisk (*) indicates when the required data element is either not on the UB-92 or the HCFA-1500. The instructions provided under that particular data element should then be followed. If a successor billing form to the UB-92/HCFA-1500 form is adopted nationally, information pertaining to the data elements listed below should be derived from that successor billing form Uniform Billing Form (UB-04) located in the latest publication of the Uniform Billing Manual prepared by the National Uniform Billing Committee or from the Centers for Medicare and Medicaid (CMS) Health Insurance Claim Form (CMS 1500). The Uniform Billing Form and the Uniform Billing Manual are located on the National Uniform Billing Committee's website at www.nubc.org. The Centers for Medicare and Medicaid Health Insurance Claim Form is available on the CMS website at www.cms.gov. Every reporting entity performing outpatient surgical procedures shall submit in an electronic data format. The nonprofit organization will develop detailed record layouts for use by reporting entities in reporting outpatient surgical data. This detailed record layout will be based upon the type of base electronic or paper-billing form utilized by the reporting entity. Outpatient surgical procedures reported ~~will~~ shall be those adopted by the ~~Board of Health~~ board as referred by the nonprofit organization. The nonprofit organization may recommend changes to the list of procedures to be reported not more than annually.

| Data Element Name | Instructions | UB-92 Form Locator | HCFA 1500 Field Number |
|--|---|--|---|
| Hospital Identifier | Hospitals and ambulatory care centers enter the six-digit Medicare provider number, or when adopted by the Board of Health board , the National Provider Identifier or other number assigned by the board. Physicians, leave blank. | N/A see instructions | N/A see instructions |
| Operating Physician or Oral and Maxillofacial Surgeon Identifier | Enter the nationally assigned physician identification number, either the Uniform Physician Identification Number (UPIN), National Provider Identifier (NPI) or it's its successor as approved by the Board of Health board for the physician identified as the operating physician for the principal procedure reported. | 83 A & B | 17a but with NPI |
| Payor Identifier | Enter the Board of Health board approved payor designation which will be the nationally assigned PAYERID, it's its successor, or English description of the payor. | 50 A, B, C 50 1 through 50 11 as described in instructions | 9d as described in instructions |
| Employer Identifier | Enter the federally approved EIN, or employer name, whichever is adopted by the Board of Health board . | 65 A with name/codes noted in instructions | 9c with name/codes noted in instructions |
| Patient Identifier | Enter the nine-digit social security number of the patient. If a social security number has not been assigned, leave blank. The nine-digit social security number is not required for patients under four years of age. | Not specified as to patient | Not specified as to patient |
| Patient Sex | | 15 | 3 |
| Date of Birth | Enter the code in MM/DD/YYYY format. | 14 Must be in format specified in instructions | 3 Must be in format specified in instructions |
| <u>Street Address</u> | | | |
| <u>City or County</u> | | | |
| Zip Code | | 13 | 5 |
| Patient Relationship to insured | | 59 A, B, C | 6 |
| Employment status code code Status Code | | 64 A, B, C | 8 |
| Status at discharge Discharge | | 22 | Use outpatient UB-92 codes |
| Admission Date | Admission/start of care date | 17 | 24 A |
| Admission Hour | Hour of admission in military time 00-24 | 18 | See instructions |
| Admission Diagnosis | Code sets- ICD 9 or CPT 4 or their successors to be specified in detailed record layouts. | 76 | * |

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| | | | |
|---|---|---------------------------------------|----------------|
| Principal Diagnoses | Code sets- ICD 9 or CPT 4 or their successors to be specified in detailed record layouts. | 67 | 21-1 |
| Secondary Diagnoses | Code sets- ICD 9 or CPT 4 or their successors to be specified in detailed record layouts. | 68 to 75t | 21-2 to 21-4 |
| External Cause of Injury | (E-code). Record all external cause of injury codes in secondary diagnoses position after recording all treated secondary diagnoses. | 77 | * |
| Co-morbid condition existing but not treated <u>Condition Existing Treated</u> | Enter the code for any co-morbid conditions existing but not treated. Code sets- ICD 9 or CPT 4 or their successors to be specified in detailed record layouts. | * | * |
| Procedures | Code sets- ICD 9 or CPT 4 or their successors to be specified in detailed record layouts. | 80 | 24d:1 to 24d:6 |
| Procedure Dates | | 81 | 24a:1 to 24a:6 |
| Revenue Center codes <u>Codes</u> | As specified for UB-92 <u>UB-04 or its successor completion, not available for HCFA-1500 CMS 1500 or its successor</u> | 42 | N/A |
| Revenue Center Units | | 46 | 24g:1 to 24g:6 |
| Revenue Center charges <u>Charges</u> | | 47 | 24f:1 to 24f:6 |
| Total Charges | | (R.C. Code 001 is for total charges.) | 28 |

12VAC5-218-25. Requirements of outpatient processed verified data.

To be considered processed and verified, a complete filing of outpatient surgical procedures specified by the board submitted by a reporting entity in aggregate per calendar quarter must be free of error at a prescribed rate. The prescribed minimum accuracy rate shall be 95% overall, with patient identifier separately calculated at 95%. The accuracy rate shall be calculated on only those fields designated in 12VAC5-218-20. Outpatient records containing invalid codes or all blank fields for any of the data elements shall be designated as error records.

12VAC5-218-30. Options for filing format. (Repealed.)

~~Reporting entities that perform on an annual basis 100 or more of the specified outpatient surgical procedures shall submit patient level data in an electronic data format. Reporting entities performing fewer than 100 of the specified outpatient surgical procedures annually that submit patient level data directly to the board or the nonprofit organization may directly submit it in electronic data format or in hard copy. If hard copy is utilized, the reporting entity shall submit for each outpatient discharged a copy of the UB-92/HCFA-1500 and an addendum sheet for those data elements not collected on the UB-92/HCFA-1500 or nationally adopted billing form. These reporting entities performing specified~~

~~outpatient surgical procedures must submit all outpatient patient level data in electronic data format by January 1, 2004.~~

12VAC5-218-40. Options for submission.

A. Each reporting entity shall submit outpatient level data in one of the following methods:

1. A reporting entity may submit the outpatient patient level data to the board for processing and verification. If data is submitted in this fashion, the board ~~will~~ shall transmit it to the nonprofit organization along with any fees submitted ~~by the reporting entity to the board~~ for the processing and verification of such data. Fees shall not exceed \$.75 per record. Fees shall not be applied to state agencies reporting data.

~~As an alternative to submitting the outpatient patient level data to the board,~~ a 2. A reporting entity may submit the outpatient patient level data along with any fees to the office of the nonprofit organization for processing and verification. If this alternative is chosen, the reporting entity ~~reporting the outpatient patient level data~~ shall notify the board and the nonprofit organization of its intent to follow this procedure.

~~In lieu of submitting the patient level data to the board or to the nonprofit organization,~~ a 3. A reporting entity may

submit ~~already~~ processed, verified data to the nonprofit organization. In the event that processed, verified data is submitted no fees shall be applied. If a reporting entity chooses this alternative for submission of patient level data, it shall notify the board and the nonprofit organization of its intent to utilize this procedure.

B. If a reporting entity decides to change the option it has chosen, it shall notify the board of its decision 30 days prior to the due date for the next submission of patient level data.

12VAC5-218-50. Contact person.

Each reporting entity shall notify ~~in writing~~ the board and the nonprofit organization in writing of the name, address, telephone number, email (where available) and fax number (where available) of a contact person. If the contact person changes, the board and the nonprofit organization shall be notified in writing as soon as possible of the name of the new ~~person who shall be the~~ contact person for that reporting entity.

NOTICE: The following forms used in administering the regulation were filed by the agency. The forms are not being published; however, online users of this issue of the Virginia Register of Regulations may click on the name of a form with a hyperlink to access it. The forms are also available from the agency contact or may be viewed at the Office of the Registrar of Regulations, General Assembly Building, 2nd Floor, Richmond, Virginia 23219.

FORMS (12VAC5-218)

[National Uniform Billing Committee Uniform Billing Form UB-04 \(undated\)](#)

[Centers for Medicare and Medicaid Health Insurance Claim Form, Sample Form, CMS 1500 \(approved 2/12\)](#)

V.A.R. Doc. No. R15-3768; Filed June 5, 2015, 11:09 a.m.

Fast-Track Regulation

Title of Regulation: **12VAC5-371. Regulations for the Licensure of Nursing Facilities (adding 12VAC5-371-191).**

Statutory Authority: §§ 32.1-12 and 32.1-127 of the Code of Virginia.

Public Hearing Information: No public hearings are scheduled.

Public Comment Deadline: July 31, 2015.

Effective Date: August 29, 2015.

Agency Contact: Susan Horn, Policy Analyst, Department of Health, 3600 West Broad Street, Richmond, VA 23230, telephone (804) 367-2157, FAX (804) 367-2149, or email susan.horn@vdh.virginia.gov.

Basis: Chapter 674 of the 2013 Acts of Assembly requires the State Board of Health to promulgate regulations governing the implementation of electronic monitoring in resident rooms. Per the legislation, the Department of Health's Office of Licensure and Certification's (VDH/OLC) current guidance document (Electronic Monitoring in Residents' Rooms, July

2007) is the template for the regulation. Therefore, the promulgation of the regulation and the authority to promulgate such regulation is mandated.

Purpose: The regulation protects and promotes public health, safety, and welfare through the establishment of a framework regulation that sets standards regarding electronic monitoring in nursing facility resident rooms. Since the promulgation of the current chapter in 1997, interest in electronic monitoring of resident rooms has grown. Family members, seeking to monitor the quality of care their loved ones receive, have expressed interest in placing video cameras or other means of electronic surveillance in the rooms of their family member in a nursing facility. Advocacy groups have joined in this effort to propose federal laws that would explicitly permit a nursing facility resident or family member to install electronic monitoring equipment with a facility's knowledge. Direction is needed to assure resident privacy and autonomy supersedes the utilization of electronic monitoring regardless of the family member or advocate demand.

Chapter 674 of the 2013 Acts of Assembly requires the board to promulgate regulations that provide a framework for nursing facilities for implementing electronic monitoring or permitting electronic monitoring when requested by a resident or a resident's legal representative.

Rationale for Using Fast-Track Process: Per Chapter 674 of the 2013 Acts of Assembly, the content of the proposed section in the regulation is to be based upon and "include existing policies and procedures set forth in the Board's guidelines governing electronic monitoring of nursing home residents' rooms and described in the publication 'Electronic Monitoring of Residents' Rooms.'" The 2007 VDH/OLC guidance was developed with the assistance and input of the Virginia State Police to accurately reflect state and federal privacy laws. As a result, the guideline has been widely utilized without further need for revision since its inception. Therefore, the department believes the proposed regulation will be noncontroversial, allowing use of the fast-track process.

Substance: As directed in Chapter 674 of the 2013 Acts of Assembly, the department intends to create a section pertaining to electronic monitoring in nursing facility resident rooms. The proposed action will provide facilities the framework to assure a resident's right to personal privacy and personal autonomy is not violated or that the facility does not violate current federal and state privacy laws regarding filming and electronic monitoring. The proposed regulation addresses policies and procedures, informed consent, resident's right to implement or refuse electronic monitoring, including admission, discharge, or transfer. In addition, the regulation outlines request and notice procedures, retention of tapes or recordings, and reporting suspected abuse, neglect, accident, or injury discovered through electronic monitoring.

Issues: Family members, having concern for the care and safety of their loved ones in a nursing facility, have expressed

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interest in utilizing electronic equipment in residents' rooms. The proposed new section of the regulation clarifies issues related to electronic monitoring and ensures nursing facilities have policies and procedures in place for such activities. Federal and state laws and regulations stipulate that a resident of a nursing facility has the right to privacy and confidentiality of his or her person, including the privacy of their bodies. Chapter 674 of the 2013 Acts of Assembly does not mandate that nursing facilities provide electronic monitoring of its residents; rather the legislation provides the direction that facilities can follow when residents or resident family members request electronic monitoring. However, such monitoring cannot be conducted without the authorized written consent of the resident, regardless of the wishes of the family.

There are no known disadvantages to the public. The primary advantages to the agency and the Commonwealth are increased care and safety for citizens throughout the Commonwealth who chose to utilize electronic monitoring. There are no known disadvantages to the Commonwealth.

Department of Planning and Budget's Economic Impact Analysis:

Summary of the Proposed Amendments to Regulation. Chapter 674 of the 2013 Acts of Assembly states:

That the Board of Health shall promulgate regulations governing the implementation of voluntary electronic monitoring in the rooms of residents of nursing homes, which shall include existing policies and procedures set forth in the Board's guidelines governing electronic monitoring of nursing home residents' rooms and described in the publication "Electronic Monitoring of Residents' Rooms.

The Board of Health consequently proposes to do just that.

Result of Analysis. The benefits likely exceed the costs for all proposed changes.

Estimated Economic Impact. As indicated by the legislation, the proposed regulations set forth existing guidelines. Electronic monitoring is completely optional. The proposed regulations introduce no new costs. There may be a small benefit in that the proposed regulations may improve clarity about current policy.

Businesses and Entities Affected. The proposed amendments concern the 278 nursing facilities licensed in Virginia. Voluntary electronic monitoring may also moderately affect electronics suppliers and electrical contractors.

Localities Particularly Affected. The proposed amendments do not disproportionately affect particular localities.

Projected Impact on Employment. The proposed amendments will not affect employment.

Effects on the Use and Value of Private Property. The proposed amendments will not significantly affect the use and value of private property.

Small Businesses: Costs and Other Effects. The proposed amendments will not significantly affect costs for small businesses.

Small Businesses: Alternative Method that Minimizes Adverse Impact. The proposed amendments do not adversely affect small businesses.

Real Estate Development Costs. The proposed amendments do not affect real estate development costs.

Legal Mandate. The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Administrative Process Act. and Executive Order Number 14 (10). Section 2.2-4007.04 requires that such economic impact analyses include, but need not be limited to, a determination of the public benefit, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. Further, if the proposed regulation has an adverse effect on small businesses, § 2.2-4007.04 requires that such economic impact analyses include (i) an identification and estimate of the number of small businesses subject to the regulation; (ii) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the regulation, including the type of professional skills necessary for preparing required reports and other documents; (iii) a statement of the probable effect of the regulation on affected small businesses; and (iv) a description of any less intrusive or less costly alternative methods of achieving the purpose of the regulation. The analysis presented above represents DPB's best estimate of these economic impacts.

Agency's Response to Economic Impact Analysis: The Department of Health concurs with the Department of Planning and Budget's economic assessment of 12VAC5-371-191 and that it is true and correct.

Summary:

In response to Chapter 674 of the 2013 Acts of Assembly, the State Board of Health is creating a new section pertaining to electronic monitoring in resident rooms that codifies a 2007 guideline the Department of Health developed to assist facilities with privacy intricacies related to installing electronic monitoring equipment. Installing such equipment is not mandatory; however, if installed, facilities must safeguard resident's autonomy and rights according to current federal and state privacy laws and regulations. The new regulation provides the framework to address policies and procedures, informed consent, and admission, discharge, or transfers and includes the equipment request process and notice procedures, retention and ownership of tapes or

recordings, and reporting suspected abuse, neglect, accident, or injury discovered through electronic monitoring.

12VAC5-371-191. Electronic monitoring in resident rooms.

A. Each nursing facility shall adopt policies and procedures for electronic monitoring in the facility. Such policies and procedures shall include, but are not limited to:

1. Identification of the designated staff person responsible for handling requests for electronic monitoring and for coordinating the installation, operation, and dismantling of all equipment;

2. An outline of the resident or resident's legal representative's responsibility for electronic monitoring operations, such as the removal and replacement of tapes, and for implementing privacy protections or unauthorized dissemination of the recordings;

3. An outline of the costs the facility may charge the resident or the resident's legal representative for electronic monitoring. Such costs shall be reasonable and may include reimbursement costs for equipment and tapes, installation, compliance with the life safety code and the building and electrical codes, maintenance or removal of the equipment, posting and removing public notices, or structural repairs to the building resulting from the removal of the equipment;

4. The process for handling covert monitoring, if discovered;

5. The process for maintaining recordings or tapes, including the designation of custodial ownership and the storage location of the tapes;

6. The process the resident or resident's legal representative should follow to report untoward or questionable incidences regarding health, safety, or quality of care that is discovered through electronic monitoring to the facility administration and the OLC, including the OLC's Complaint Hotline telephone number; and

7. The process for residents, legal representatives, or staff to report suspected abuse, neglect, accident, or injury that is discovered through electronic monitoring.

B. Residents and legal representatives of residents shall be notified of the facility's policies and procedures for electronic monitoring upon admission and annually thereafter.

C. All requests for electronic monitoring shall be made in writing and signed by the resident or the resident's legal representative if the resident has been properly assessed incapable of requesting and authorizing the monitoring. Family members cannot insist on monitoring over the objections of the resident or the resident's roommate.

D. Residents and legal representatives of residents, if applicable, shall be fully informed of the right of a resident to implement electronic monitoring in the room in which he

resides, the right of any resident to consent or refuse to consent to electronic monitoring in any room in which he resides, and the options available to any resident in cases in which he refuses to consent to electronic monitoring in any room in which he resides, including transfer to another room. The informed consent of all residents assigned to the monitored room must be obtained prior to installation of electronic monitoring equipment. A copy of the signed consent of all residents assigned to the monitored room shall be kept in each resident's respective medical record and with the staff person designated in subsection A of this section. All residents assigned to the monitored room shall be permitted to impose conditions for consent to electronic monitoring.

E. Electronic monitoring equipment shall be installed in a manner that is safe for residents, staff, or visitors. The equipment shall be fixed and unable to rotate. Facilities shall make reasonable physical accommodation for the monitoring equipment, including providing a reasonably secure place to mount the device and access to power sources for the device.

F. The facility shall conspicuously post and maintain a notice at the entrance to the resident's room stating that an electronic monitoring device is in operation. Facilities shall notify all staff and their OLC Long Term Care Supervisor that electronic monitoring is in use.

G. Only authorized monitoring is permitted. Covert monitoring is prohibited by law. Any monitoring of oral communication is subject to both federal and state wiretap laws and requires additional privacy protections to be in place.

H. Facilities shall have the option of retaining ownership of the recordings. If the facility chooses to retain ownership of the recordings, the recordings shall become part of the resident's medical record and the facility shall:

1. Accommodate family viewing of any recording, including but not limited to:

a. Providing appropriate playing or viewing equipment;

b. Privacy during viewing; and

c. Viewing times that are convenient to the resident's family.

2. Make the recordings available in accordance with all state and federal regulations that pertain to medical records.

I. A nursing facility shall not refuse to admit an individual and shall not discharge or transfer a resident solely because he has requested to implement or has implemented electronic monitoring in any room in which he resides, in accordance with this chapter, because the facility has discovered covert monitoring on the part of the resident or the resident's legal representative, or because he refuses to consent to electronic monitoring in any room in which he resides.

VA.R. Doc. No. R15-3575; Filed June 5, 2015, 11:10 a.m.

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Final Regulation

Title of Regulation: **12VAC5-475. Regulations Implementing the Virginia Organ and Tissue Donor Registry (amending 12VAC5-475-10, 12VAC5-475-30, 12VAC5-475-50 through 12VAC5-475-90; adding 12VAC5-475-75; repealing 12VAC5-475-20, 12VAC5-475-40).**

Statutory Authority: § 32.1-292.2 of the Code of Virginia.

Effective Date: July 31, 2015.

Agency Contact: Janice Hicks, Department of Health, 109 Governor Street, Richmond, VA 23219, telephone (804) 864-7662, FAX (804) 864-7670, or email janice.hicks@vdh.virginia.gov.

Summary:

The amendments (i) change references to the Virginia Organ and Tissue Donor Registry to the Virginia Donor Registry to conform to 2006 amendments to §§ 32.1-292.2 and 32.1-297.1 of the Code of Virginia and replace references repealed by the 2007 Session of the General Assembly with references to the Revised Uniform Anatomical Gift Act (§ 32.1-291.1 et seq. of the Code of Virginia); (ii) remove unnecessary definitions and modify definitions for consistency with the Revised Uniform Anatomical Gift Act and to include donor registration processes available on the DonateLifeVirginia.org website; (iii) specify the data that are maintained and annually reported to the State Board of Health; (iv) specify that designees may assist individuals in completing a signed application; and (v) specify that a willingness to donate may be indicated through a donor registration process or mail-in form available on the DonateLifeVirginia.org website.

Summary of Public Comments and Agency's Response: No public comments were received by the promulgating agency.

CHAPTER 475

REGULATIONS IMPLEMENTING THE VIRGINIA ORGAN AND TISSUE DONOR REGISTRY

Part I

Definitions and General Information

12VAC5-475-10. Definitions.

The following words and terms when used in this chapter shall have the following meanings, unless the context clearly indicates otherwise:

~~"Agent" means an adult appointed by the declarant under an advance directive, executed or made in accordance with the provisions of § 54.1-2983 of the Code of Virginia, to make health care decisions for him, including decisions relating to visitation, provided the advance directive makes express provisions for visitation and subject to physician orders and policies of the institution to which the declarant is admitted. The declarant may also appoint an adult to make, after the declarant's death, an anatomical gift of all or any part of his~~

~~body pursuant to Article 2 (§ 32.1-289 et seq.) of Chapter 8 of Title 32.1 of the Code of Virginia.~~

~~"Anatomical gift" or "organ donation" means a donation of organs, tissues, or eyes or all or any part of a human body to take effect upon or after death all or part of a human body to take effect after the donor's death for the purpose of transplantation, therapy, research, or education.~~

~~"Board" means the State Board of Health.~~

~~"Commissioner" means the State Health Commissioner or his duly designated officer or agent.~~

~~"Decedent" means a deceased individual and includes a stillborn infant or fetus whose body or part is or may be the source of an anatomical gift. The term includes a stillborn infant and, subject to restrictions imposed by law other than the restrictions imposed by the Revised Uniform Anatomical Gift Act (§ 32.1-291.1 et seq. of the Code of Virginia), a fetus.~~

~~"Department" means the State Virginia Department of Health.~~

~~"Designee" means a person designated by an organ procurement organization, eye bank, or tissue bank to identify and determine the suitability of a potential donor.~~

~~"Document of gift" means a donor card, a statement attached to or imprinted on a motor vehicle driver's or chauffeur's license or the record of the individual's motor vehicle driver's or chauffeur's license, a will, an advance directive, or other writing used to make an organ donation or an anatomical gift or other record used to make an anatomical gift. The term includes a statement or symbol made pursuant to § 46.2-342 G of the Code of Virginia on a driver's license, an identification card, or a donor registry. "Document of gift" also includes a record of the donor's gift stored in a registry.~~

~~"DonateLifeVirginia.org" means the official Virginia website that provides information on organ and tissue donation and provides a registration form for registrants to make an anatomical gift in accordance with the Revised Uniform Anatomical Gift Act (§ 32.1-291.1 et seq. of the Code of Virginia).~~

~~"Donor" means an individual who makes a donation of organs, tissues, or eyes or an anatomical gift of all of his body whose body or part is the subject of an anatomical gift.~~

~~"Disseminate" means to release, transfer, or otherwise communicate information orally, in writing, or by electronic means.~~

~~"Eye bank" means an agency a person that is licensed, accredited, or regulated under federal or state law to engage in the recovery, screening, testing, processing, storage, or distribution of human eyes or portions of human eyes and that is a member of the Virginia Transplant Council, accredited by the Eye Bank Association of America or the American Association of Tissue Banks and operating in the Commonwealth of Virginia.~~

"Guardian" means a person appointed by the a court who is responsible for the personal affairs of an incapacitated person, including responsibility for making decisions regarding the person's support, care, health, safety, habilitation, education, and therapeutic treatment, and, if not inconsistent with an order of commitment, residence. Where the context plainly indicates, the term includes a "limited guardian" or a "temporary guardian." The term includes a local or regional program designated by the Department for the Aging as a public guardian pursuant to Article 2 (§ 2.2-711 et seq.) of Chapter 7 of Title 2.2 of the Code of Virginia to make decisions regarding the support, care, education, health, or welfare of an individual. The term does not include a guardian ad litem, except when the guardian ad litem is authorized by a court to consent to donation.

"Informed consent" means the knowing and voluntary agreement, obtained without undue influence or any use of force, fraud, deceit, duress, or other form of constraint or coercion, of a person who is capable of exercising free power of choice.

"Organ procurement organization" means an agency certified by the United States Health Care Financing Administration a person designated by the Secretary of the U.S. Department of Health and Human Services as an organ procurement organization that is also a member of the Virginia Transplant Council.

"Part" means an organ, tissue, eye, bone, artery, blood, fluid or other portion of a human body an eye, or tissue of a human being. The term does not include the whole body.

"Personal information" means all information that describes, locates or indexes anything about an individual, as defined in § 2.2-3801 of the Code of Virginia.

"Procurement" means the recovery of any donated part by a licensed physician licensed, accredited, or approved under the laws of any state or a technician who is qualified in accordance with § 32.1-291.14 of the Code of Virginia.

"Registry" means the Organ and Tissue Virginia Donor Registry for the Commonwealth, which shall be administered by the Department of Health created, compiled, operated, maintained, and modified as necessary by the Virginia Transplant Council in accordance with § 32.1-292.2 of the Code of Virginia. The registry shall maintain and update, as needed, the pertinent information on all Virginians who have indicated a willingness to donate.

"Tissue bank" means an agency a person that is licensed, accredited, or regulated under federal or state law to engage in the recovery, screening, testing, processing, storage, or distribution of tissue, and that is a member of the Virginia Transplant Council, accredited by the American Association of Tissue Banks, and operating in the Commonwealth of Virginia.

"UNOS" means the United Network for Organ Sharing.

"VTC" means the Virginia Transplant Council, a program within the Virginia Department of Health that exists to promote and coordinate educational and information activities as related to the organ, tissue, and eye donation process and transplantation in the Commonwealth of Virginia.

12VAC5-475-20. Purpose. (Repealed.)

These regulations are designed to accomplish the tasks listed in § 32.1-292.2 C 1 and 2 of the Code of Virginia by establishing procedures for the administration of the registry.

12VAC5-475-30. Administration.

A. The board has the responsibility for promulgating regulations, in consultation with the VTC, pertaining to the administration of the organ and tissue donor registry.

B. The commissioner is the executive officer for the State Board of Health with the authority of the board when it is not in session, subject to the rules and regulations of and review by the board.

C. A. The VTC, as delegated authorized by the board pursuant to § 32.1-292.2 D 2 of the Code of Virginia, is responsible for analyzing shall analyze registry data under research protocols directed toward determination and identification of means to promote and increase organ, eye, and tissue donation within the Commonwealth.

D. Confidentiality. B. All persons responsible for the administration of the organ and tissue donor registry Virginia Donor Registry shall ensure that the registry and all information therein shall be confidential in accordance with §§ 32.1-127.1:03 and 32.1-292.2 B of the Code of Virginia and other applicable state and federal law.

C. The VTC shall maintain and report annually the following information to the board: (i) the number of unique individuals registered in the registry; (ii) the number of recovered organ donors; (iii) the number or recovered organ donors who were identified through the registry; (iv) the number of recovered tissue donors; (v) the number of recovered tissue donors who were identified through the registry; (vi) the number of recovered eye/cornea donors; and (vii) the number of recovered eye/cornea donors identified through the registry. This report shall be made on or before September 30 of each year and contain information pertaining to the previous fiscal year.

12VAC5-475-40. Access. (Repealed.)

The registry and all information therein shall be accessible 24 hours a day and only to the department and the specific designees of accredited organ procurement organizations, eye banks and tissue banks operating in or serving Virginia and which are members of the VTC, for the purpose of identifying a potential donor according to the provisions of §§ 32.1-127.1 and 32.1-292.2, and subsection F of § 46.2-342.

The name of such designees shall be provided to the VTC. All other persons or entities shall be prohibited from having access to the registry. If at any time the designee is unable to carry out his responsibilities with respect to the registry, a

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replacement shall be selected and the VTC shall be notified of such replacement.

~~All accredited organ procurement organizations, eye banks, and tissue banks with authorized access to the registry shall be required to report annually to the VTC the following outcome data: (i) the number of times the registry is accessed; (ii) the number of times access to the registry results in an unsuccessful search (i.e., the individual is not a member of the registry); (iii) the number of times an organ, tissue or eye procurement proceeds solely from accessing the registry; (iv) the number of times the next of kin's consent is obtained in addition to a successful search of the registry; (v) the number of times donation of organs, tissue, or eyes occurred as a result of alternative donation designation documentation; and (vi) the number of times the next of kin's consent is obtained without accessing the registry.~~

Part II

Registry Information

12VAC5-475-50. Registry membership.

~~Those persons 18 years and older who have indicated a willingness to donate in accordance with § 32.1-290 of the Code of Virginia and have completed the required registration form (VTC 1) shall be recorded in the registry. Persons under the age of 18 may enter the registry upon completion of the registration form and only with the written consent of his parent or legal guardian. No person may enter another person in the registry. The registry shall record anatomical gifts made in accordance with the Revised Uniform Anatomical Gift Act (§ 32.1-291.1 et seq. of the Code of Virginia). Designees may assist individuals to complete a signed donor registration form.~~

Those persons who have indicated a willingness to donate designated an anatomical gift on their driver's license or personal identification card as authorized by the Department of Motor Vehicles will be automatically entered into the registry. Through inter-agency interagency agreement, the Department of Motor Vehicles will assist the department by electronically providing this information to the registry on a daily regular basis as agreed upon by the Department of Motor Vehicles and the VTC. The VTC shall contact any such self-identified persons by United States mail regarding notification of membership to the registry and request the completion of the registration form (VTC 1). Persons who make an anatomical gift by completing the donor registration form available on the DonateLifeVirginia.org website will also be automatically entered into the registry.

12VAC5-475-60. Data to be recorded.

The following information shall be recorded in the registry: the donor's full name, address (including county or independent city of residence with zip code), ~~telephone number~~, date of birth, age, sex, race, and driver's license number or unique identification number. If the donor is under the age of 18, the name, ~~telephone number~~, address, and

unique identification number of the donor's parent or legal guardian shall be recorded.

~~Information shall be recorded by completing the Virginia Organ and Tissue Donor Registry Form (VTC 1).~~

12VAC5-475-70. Removal from the registry.

A. A person who has joined the registry may have his name removed amend his anatomical gift or revoke the anatomical gift by filing an appropriate form (VTC 0) with the VTC or in accordance with subsections E and F of § 32.1-290 the Revised Uniform Anatomical Gift Act (§ 32.1-291.1 et seq. of the Code of Virginia) or subsection G I of § 46.2-342 of the Code of Virginia.

B. Persons who revoke an anatomical gift shall be automatically removed from the registry by the VTC.

C. Persons can revoke an anatomical gift by completing any of the following actions:

1. Notifying the VTC in writing using an appropriate form provided by the VTC, which shall result in being removed from the registry upon receipt of notification by the VTC;

2. Completing the form available on the DonateLifeVirginia.org website, which shall result in immediate removal from the registry by the VTC; or

3. Not renewing an anatomical gift when renewing or replacing a driver's license or personal identification card at the Department of Motor Vehicles, which will result in being removed from the registry within 24 hours of receipt of notification to the VTC from the Department of Motor Vehicles.

D. The name of a person entered in the registry who has died shall be removed from the registry within 90 days of notification of death by the Virginia Office Division of Vital Records and Health Statistics.

Part III

Access, Use, and Dissemination of Registry Information

12VAC5-475-75. Access.

A. Except as otherwise provided by law, no person shall have access to the registry except as provided in this section.

B. Designees shall have access to the registry for the purpose of creating, amending, or revoking the registrant's anatomical gift.

C. The registry and all information therein shall be accessible 24 hours a day and only to specific designees of organ procurement organizations, eye banks, and tissue banks for the purpose of identifying a potential donor according to the provisions of §§ 32.1-127 and 32.1-292.2 of the Code of Virginia. The name of such designees shall be provided to the VTC. If at any time the designee is unable to carry out his responsibilities with respect to the registry, a replacement shall be selected and the VTC shall be notified of such replacement.

D. Persons who require access to the registry for operational and maintenance purposes shall have access to the registry upon receipt from VTC of appropriate access privileges.

E. The department shall be provided access to the registry for the purpose of exercising responsibility for oversight of VTC activities. The department shall not have access to personal information of registrants unless such access is required for the department's oversight responsibilities.

Part III

Use and Dissemination of Registry Information

12VAC5-475-80. Use.

The designees of ~~accredited~~ organ procurement organizations, eye banks, and tissue banks and all other persons with authorized access to the registry shall have an organizational or individual pass code, or both, assigned by the VTC to gain entry to the registry via the ~~VTC~~ website.

Once entry to the registry has been established, the designees shall enter the decedent's full name, ~~the decedent's~~ date of birth, ~~the decedent's~~ driver's license number, ~~the decedent's~~ unique identification number, or any combination thereof, to verify whether the decedent made a donor designation in the registry. Once the decedent's donor designation has been verified, the designees shall include the ~~intent to donate~~ document of gift as part of the donor record maintained by the ~~accredited~~ organ procurement organization, eye bank, and tissue bank.

If the decedent is not in the registry, the designees shall enter the registry. ~~Designees shall not perform a search of the registry on any other person other than the decedent.~~

12VAC5-475-90. Dissemination.

The ~~accredited~~ organ procurement organizations, eye banks, and tissue banks with authorized access to the registry may disclose the contents of the decedent's documented donation designation document of gift to the decedent's next of kin, the nearest available relative, a member of the decedent's household, an individual with an affinity relationship, ~~and the primary treating physician~~ decedent's physicians, and any other person or entity specified in §§ 32.1-291.9 and 32.1-291.11 of the Code of Virginia, in order to demonstrate that the decedent's wish to donate decedent made an anatomical gift in accordance with §§ 32.1-290 the Revised Uniform Anatomical Gift Act (§ 32.1-291.1 et seq. of the Code of Virginia), § 46.2-342 of the Code of Virginia, 54.1-2984, and 54.1-2986 or an advance directive executed pursuant to the Health Care Decisions Act (§ 54.1-2981 et seq. of the Code of Virginia).

~~The VTC may disclose to the DMV the donor designation on those persons who are recorded in the registry in order that the driver's record accurately reflect those persons' wishes to donate pursuant to subsections E and F of § 46.2-342 of the Code of Virginia.~~

NOTICE: The following form used in administering the regulation was filed by the agency. The form is not being published; however, online users of this issue of the Virginia Register of Regulations may click on the name of the form with a hyperlink to access it. The form is also available from the agency contact or may be viewed at the Office of the Registrar of Regulations, General Assembly Building, 2nd Floor, Richmond, Virginia 23219.

FORMS (12VAC5-475)

~~Virginia Organ and Tissue Donor Registry Removal Form, VTC 0 (eff. 7/00).~~

~~Virginia Organ and Tissue Donor Registry Form, VTC 1 (eff. 7/00).~~

[~~Registry Removal Form, Donate Life Virginia (undated)~~ [Registry Removal Form, DonateLifeVirginia.org](http://RegistryRemovalForm.DonateLifeVirginia.org) (eff. 12/13)]

VA.R. Doc. No. R08-1335; Filed May 29, 2015, 11:26 a.m.

TITLE 20. PUBLIC UTILITIES AND TELECOMMUNICATIONS

STATE CORPORATION COMMISSION

Proposed Regulation

REGISTRAR'S NOTICE: The State Corporation Commission is claiming an exemption from the Administrative Process Act in accordance with § 2.2-4002 A 2 of the Code of Virginia, which exempts courts, any agency of the Supreme Court, and any agency that by the Constitution is expressly granted any of the powers of a court of record.

Title of Regulation: **20VAC5-315. Regulations Governing Net Energy Metering (amending 20VAC5-315-20, 20VAC5-315-30, 20VAC5-315-40, 20VAC5-315-70).**

Statutory Authority: §§ 12.1-13 and 56-594 of the Code of Virginia.

Public Hearing Information: A public hearing will be scheduled upon request.

Public Comment Deadline: July 31, 2015.

Agency Contact: Armando J. deLeón, Utilities Engineer, Division of Energy Regulation, State Corporation Commission, P.O. Box 1197, Richmond, VA 23218, telephone (804) 371-9392, FAX (804) 371-9350, or email armando.deleon@scc.virginia.gov.

Summary:

Pursuant to Chapters 431 and 432 of the 2015 Acts of Assembly, § 56-594 of the Code of Virginia was amended to, among other things, increase the maximum generating capacity of an electrical generating facility owned or

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operated by an electric utility's nonresidential customer that may be eligible for participation in the utility's net energy metering program and specify that new net metering facilities may not exceed the customer's expected annual energy consumption based on 12 months of billing history. The proposed amendments to the rules (i) increase the capacity limit for participation by nonresidential customers in the net energy metering program; (ii) eliminate the authorization for electric utilities to allow a higher capacity limit for nonresidential customers than that set forth in the statute; (iii) require that new net metering facilities may not exceed the customer's expected annual energy consumption based on 12 months of billing history; (iv) require any eligible customer-generator seeking to participate in net energy metering to notify its supplier and receive approval to interconnect prior to installation of an electrical generating facility; and (v) clarify requirements regarding the customer-generator's obligation to bear the costs of equipment required for the interconnection to the supplier's electric distribution system.

AT RICHMOND, JUNE 5, 2015

COMMONWEALTH OF VIRGINIA, ex rel.

STATE CORPORATION COMMISSION

CASE NO. PUE-2015-00057

Ex Parte: In the matter of amending regulations governing net energy metering

ORDER ESTABLISHING PROCEEDING

The Regulations Governing Net Energy Metering, 20 VAC 5-315-10 et seq. ("Net Energy Metering Rules"), adopted by the State Corporation Commission ("Commission") pursuant to § 56-594 of the Virginia Electric Utility Regulation Act, Chapter 23 (§ 56-576 et seq.) of Title 56 of the Code of Virginia ("Code"), establish the requirements for participation by an eligible customer-generator in net energy metering in the Commonwealth of Virginia. The Net Energy Metering Rules include conditions for interconnection and metering, billing, and contract requirements between net metering customers, electric distribution companies, and energy service providers.

Chapters 431 and 432 of the 2015 Acts of Assembly amended § 56-594 of the Code to: (1) increase the capacity limit for participation by nonresidential customers in the net energy metering program from 500 kilowatts to one megawatt for facilities placed into service after July 1, 2015; (2) eliminate the authorization for electric utilities to allow a higher capacity limit for nonresidential customers than that set forth in the statute; (3) require that the capacity of any generating facility installed after July 1, 2015, shall not exceed the expected annual energy consumption based on the previous twelve months of billing history or an annualized calculation of billing history if twelve months of billing history is not available; (4) require any eligible customer-

generator seeking to participate in net energy metering to notify its supplier and receive approval to interconnect prior to installation of an electrical generating facility; and (5) clarify requirements regarding the customer-generator's obligation to bear the costs of equipment required for the interconnection to the supplier's electric distribution system. The current Net Energy Metering Rules thus must be revised to reflect the changes set forth in Chapters 431 and 432.

NOW THE COMMISSION, upon consideration of the matter, is of the opinion and finds that a proceeding should be established to amend the Net Energy Metering Rules to increase the capacity limit for participation by nonresidential customers in the net energy metering program, to eliminate the authorization for electric utilities to allow a higher capacity limit for nonresidential customers than that set forth in the statute, to require that new net metering facilities do not exceed the customer's expected annual energy consumption based on the twelve months of billing history, to require any eligible customer-generator seeking to participate in net energy metering to notify its supplier and receive approval to interconnect prior to installation of an electrical generating facility, and to clarify requirements regarding the customer-generator's obligation to bear the costs of equipment required for the interconnection to the supplier's electric distribution system.

To initiate this proceeding, the Commission Staff has prepared proposed rules ("Proposed Rules") which are appended to this Order. We will direct that notice of the Proposed Rules be given to the public and that interested persons be provided an opportunity to file written comments on, propose modifications or supplements to, or request a hearing on the Proposed Rules. We will further direct that each Virginia electric distribution company within the meaning of 20 VAC 5-315-20 serve a copy of this Order upon each of their respective net metering customers and file a certificate of service. Individuals should be specific in their comments, proposals, or supplements to the Proposed Rules and address only those issues pertaining to the amendment of § 56-594 of the Code pursuant to Chapters 431 and 432 of the 2015 Acts of Assembly.

Accordingly, IT IS ORDERED THAT:

- (1) This case is docketed and assigned Case No. PUE-2015-00057.
- (2) The Commission's Division of Information Resources shall forward a copy of this Order Establishing Proceeding to the Registrar of Regulations for publication in the Virginia Register of Regulations.
- (3) On or before June 23, 2015, each Virginia electric distribution company shall serve a copy of this Order upon each of their respective net metering customers and file a certificate of service no later than July 10, 2015, consistent with the findings above.
- (4) On or before July 31, 2015, any interested person may comment on, propose modifications or supplements to, or

request a hearing on the Proposed Rules by filing an original and fifteen (15) copies of such comments or requests with Joel H. Peck, Clerk, State Corporation Commission, c/o Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Individuals should be specific in their comments, proposals, or supplements to the Proposed Rules and address only those issues pertaining to the amendment of § 56-594 of the Code of Virginia pursuant to Chapters 431 and 432 of the 2015 Acts of Assembly. Issues outside the scope of implementing this amendment will not be open for consideration. Any request for hearing shall state with specificity why the issues raised in the request for hearing cannot be adequately addressed in written comments. If a sufficient request for hearing is not received, the Commission may consider the matter and enter an order based upon the papers filed herein. Interested parties shall refer in their comments or requests to Case No. PUE-2015-00057. Interested persons desiring to submit comments electronically may do so by following the instructions available at the Commission's website: <http://www.scc.virginia.gov/case>.

(5) This matter is continued for further orders of the Commission.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to all persons on the official Service List in this matter. The Service List is available from the Clerk of the State Corporation Commission, c/o Document Control Center, 1300 East Main Street, First Floor, Tyler Building, Richmond, Virginia 23219.

20VAC5-315-20. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Agricultural business" means any sole proprietorship, corporation, partnership, electing small business (Subchapter S) corporation, or limited liability company engaged primarily in the production and sale of plants and animals, products collected from plants and animals, or plant and animal services that are useful to the public.

"Agricultural net metering customer" means a customer that operates an electrical generating facility consisting of one or more agricultural renewable fuel generators having an aggregate generation capacity of not more than 500 kilowatts as part of an agricultural business under a net metering service arrangement. An agricultural net metering customer may be served by multiple meters of one utility that are located at separate but contiguous sites and that may be aggregated into one account. This account shall be served under the appropriate tariff.

"Agricultural renewable fuel generator" or "agricultural renewable fuel generating facility" means one or more electrical generators that:

1. Use as their sole energy source solar power, wind power, or aerobic or anaerobic digester gas;
2. The agricultural net metering customer owns and operates, or has contracted with other persons to own or operate, or both;
3. Are located on land owned or controlled by the agricultural business;
4. Are connected to the agricultural net metering customer's wiring on the agricultural net metering customer's side of the agricultural net metering customer's interconnection with the distributor;
5. Are interconnected and operated in parallel with an electric company's distribution facilities; and
6. Are used primarily to provide energy to metered accounts of the agricultural business.

"Billing period" means, as to a particular agricultural net metering customer or a net metering customer, the time period between the two meter readings upon which the electric distribution company and the energy service provider calculate the agricultural net metering customer's or net metering customer's bills.

"Billing period credit" means, for a nontime-of-use agricultural net metering customer or a nontime-of-use net metering customer, the quantity of electricity generated and fed back into the electric grid by the agricultural net metering customer's agricultural renewable fuel generator or generators or by the net metering customer's renewable fuel generator or generators in excess of the electricity supplied to the customer over the billing period. For time-of-use agricultural net metering customers or time-of-use net metering customers, billing period credits are determined separately for each time-of-use tier.

"Contiguous sites" means a group of land parcels in which each parcel shares at least one boundary point with at least one other parcel in the group. Property whose surface is divided only by public right-of-way is considered contiguous.

"Customer" means a net metering customer or an agricultural net metering customer.

"Demand charge-based time-of-use tariff" means a retail tariff for electric supply service that has two or more time-of-use tiers for energy-based charges and an electricity supply demand (kilowatt) charge.

"Electric distribution company" means the entity that owns and/or operates the distribution facilities delivering electricity to the premises of an agricultural net metering customer or a net metering customer.

"Energy service provider (supplier)" means the entity providing electricity supply service, either tariffed or competitive service, to an agricultural net metering customer or a net metering customer.

"Excess generation" means the amount of electrical energy generated in excess of the electrical energy consumed by the

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agricultural net metering customer or net metering customer over the course of the net metering period. For time-of-use agricultural net metering customers or net metering customers, excess generation is determined separately for each time-of-use tier.

"Generator" or "generating facility" means an electrical generating facility consisting of one or more renewable fuel generators or one or more agricultural renewable fuel generators that meet the criteria under the definition of "net metering customer" and "agricultural net metering customer," respectively.

"Net metering customer" means a customer owning and operating, or contracting with other persons to own or operate, or both, an electrical generating facility consisting of one or more renewable fuel generators having an aggregate generation capacity of not more than 20 kilowatts for residential customers and not more than ~~500 kilowatts~~ one megawatt for nonresidential customers ~~unless the electric distribution company has chosen a higher capacity limit for nonresidential customers in its net metering tariff.~~ The generating facility shall be operated under a net metering service arrangement.

"Net metering period" means each successive 12-month period beginning with the first meter reading date following the final interconnection of an agricultural net metering customer or a net metering customer's generating facility consisting of one or more agricultural renewable fuel generators or one or more renewable fuel generators, respectively, with the electric distribution company's distribution facilities.

"Net metering service" means providing retail electric service to an agricultural net metering customer operating an agricultural renewable fuel generating facility or a net metering customer operating a renewable fuel generating facility and measuring the difference, over the net metering period, between the electricity supplied to the customer from the electric grid and the electricity generated and fed back to the electric grid by the customer.

"Person" means any individual, sole proprietorship, corporation, limited liability company, partnership, association, company, business, trust, joint venture, or other private legal entity, the Commonwealth, or any city, county, town, authority, or other political subdivision of the Commonwealth.

"Renewable Energy Certificate" or "REC" represents the renewable energy attributes associated with the production of one megawatt-hour (MWh) of electrical energy by a generator.

"Renewable fuel generator" or "renewable fuel generating facility" means one or more electrical generators that:

1. Use renewable energy, as defined by § 56-576 of the Code of Virginia, as their total fuel source;

2. The net metering customer owns and operates, or has contracted with other persons to own or operate, or both;

3. Are located on the net metering customer's premises and connected to the net metering customer's wiring on the net metering customer's side of its interconnection with the distributor;

4. Are interconnected pursuant to a net metering arrangement and operated in parallel with the electric distribution company's distribution facilities; and

5. Are intended primarily to offset all or part of the net metering customer's own electricity requirements. The capacity of any generating facility installed after July 1, 2015, shall not exceed the expected annual energy consumption based on the previous 12 months of billing history or an annualized calculation of billing history if 12 months of billing history is not available.

"Time-of-use customer" means an agricultural net metering customer or net metering customer receiving retail electricity supply service under a demand charge-based time-of-use tariff.

"Time-of-use period" means an interval of time over which the energy (kilowatt-hour) rate charged to a time-of-use customer does not change.

"Time-of-use tier" or "tier" means all time-of-use periods given the same name (e.g., on-peak, off-peak, critical peak, etc.) for the purpose of time-differentiating energy (kilowatt-hour)-based charges. The rates associated with a particular tier may vary by day and by season.

20VAC5-315-30. Company notification.

A. A prospective agricultural net metering customer or a prospective net metering customer (hereinafter referred to as "customer") shall submit a completed commission-approved notification form to the electric distribution company and, if different from the electric distribution company, to the energy service provider, according to the time limits in this subsection. If the prospective customer has contracted with another person to own or operate, or both, the generator or generators, then the notice will include detailed, current, and accurate contract information for the owner or operator, or both, including without limitation, the name and title of one or more individuals responsible for the interconnection and operation of the generator or generators, a telephone number, a physical street address other than a post office box, a fax number, and an email address for each such person.

1. ~~A prospective residential customer proposing to install an electrical generating facility with an alternating current capacity of 25 kilowatts or less shall submit the notification form at least 30 days prior to the date the prospective customer intends to interconnect the generating facility to the electric distribution company's distribution facilities. All equipment necessary to complete the interconnection of the generating facility shall have been installed prior to submitting the notification form shall~~

notify its supplier and receive approval to interconnect prior to installation of an electrical generating facility. The electric distribution company shall have 30 days from the date of notification to determine whether the requirements contained in 20VAC5-315-40 have been met. The date of notification shall be considered to be the third day following the mailing of the notification form by the prospective customer.

2. A ~~prospective nonresidential customer proposing to install an electrical generating facility with an alternating current capacity greater than 25 kilowatts shall submit the notification form at least 60 days prior to the date the prospective customer intends to interconnect the generating facility to the electric distribution company's distribution facilities. All equipment necessary to complete the interconnection of the generating facility shall have been installed prior to submitting the notification form. The prospective customer should contact its electric distribution company prior to making financial commitments shall~~ notify its supplier and receive approval to interconnect prior to installation of an electrical generating facility. The electric distribution company shall have 60 days from the date of notification to determine whether the requirements contained in 20VAC5-315-40 have been met. The date of notification shall be considered to be the third day following the mailing of the notification form by the prospective customer.

B. Thirty-one days after the date of notification for a ~~generating facility with an alternating current capacity of 25 kilowatts or less residential customer~~, and 61 days after the date of notification for a ~~generating facility with an alternating current capacity greater than 25 kilowatts nonresidential customer~~, the prospective customer may interconnect and begin operation of the generating facility unless the electric distribution company or the energy service provider requests a waiver of this requirement under the provisions of 20VAC5-315-80 prior to the 31st or 61st day, respectively. In cases where the electric distribution company or energy service provider requests a waiver, a copy of the request for waiver must be mailed simultaneously by the requesting party to the prospective customer and to the commission's Division of Energy Regulation.

C. The electric distribution company shall file with the commission's Division of Energy Regulation a copy of each completed notification form within 30 days of final interconnection.

20VAC5-315-40. Conditions of interconnection.

A. A prospective customer may begin operation of the generating facility on an interconnected basis when:

1. The customer has properly notified both the electric distribution company and energy service provider (in accordance with 20VAC5-315-30) of the customer's intent to interconnect.

2. If required by the electric distribution company's tariff, the customer has installed a lockable, electric distribution company accessible, load breaking manual disconnect switch at each of the facility's generators.

3. In cases where a licensed electrician installs the customer's generator or generators, the licensed electrician has certified, by signing the commission-approved notification form, that any required manual disconnect switch or switches have been installed properly and that the generator or generators have been installed in accordance with the manufacturer's specifications as well as all applicable provisions of the National Electrical Code. If the customer or licensed Virginia Class A or B general contractor installs the customer's generator or generators, the signed final electrical inspection can be used in lieu of the licensed electrician's certification.

4. The vendor has certified, by signing the commission-approved notification form, that the generator or generators being installed are in compliance with the requirements established by Underwriters Laboratories or other national testing laboratories in accordance with IEEE Standard 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems, July 2003.

5. In the case of static inverter-connected generators with an alternating current capacity in excess of 10 kilowatts, the customer has had the inverter settings inspected by the electric distribution company. The electric distribution company may impose a fee on the customer of no more than \$50 for each generator that requires this inspection.

6. In the case of nonstatic inverter-connected generators, the customer has interconnected according to the electric distribution company's interconnection guidelines and the electric distribution company has inspected all protective equipment settings. The electric distribution company may impose a fee on the customer of no more than \$50 for each generator that requires this inspection.

7. ~~In the case of a customer's electrical generating facility having an alternating current capacity greater than 25 kilowatts, the~~ The following requirements shall be met before interconnection may occur:

a. Electric distribution facilities and customer impact limitations. A customer's generator shall not be permitted to interconnect to distribution facilities if the interconnection would reasonably lead to damage to any of the electric distribution company's facilities or would reasonably lead to voltage regulation or power quality problems at other customer revenue meters due to the incremental effect of the generator on the performance of the electric distribution system, unless the customer reimburses the electric distribution company for its cost to modify any facilities needed to accommodate the interconnection, including any reasonable costs of equipment required for the interconnection.

Regulations

b. Secondary, service, and service entrance limitations. The capacity of the generators at any one service location shall be less than the capacity of the electric distribution company-owned secondary, service, and service entrance cable connected to the point of interconnection, unless the customer reimburses the electric distribution company for ~~its cost to modify any facilities needed~~ all reasonable costs of equipment required to accommodate the interconnection.

c. Transformer loading limitations. A customer's generator shall not have the ability to overload the electric distribution company's transformer, or any transformer winding, beyond manufacturer or nameplate ratings, unless the customer reimburses the electric distribution company for ~~its cost to modify any facilities needed~~ all reasonable costs of equipment required to accommodate the interconnection.

d. Integration with electric distribution company facilities grounding. The grounding scheme of each generator shall comply with IEEE 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems, July 2003, and shall be consistent with the grounding scheme used by the electric distribution company. If requested by a prospective customer, the electric distribution company shall assist the prospective customer in selecting a grounding scheme that coordinates with its distribution system.

e. Balance limitation. The generator or generators shall not create a voltage imbalance of more than 3.0% at any other customer's revenue meter if the electric distribution company transformer, with the secondary connected to the point of interconnection, is a three-phase transformer, unless the customer reimburses the electric distribution company for ~~its cost to modify any facilities needed~~ all reasonable costs of equipment required to accommodate the interconnection.

B. A prospective customer shall not be allowed to interconnect a generator if doing so will cause the total rated generating alternating current capacity of all interconnected net metered generators, as defined in 20VAC5-315-20, within that customer's electric distribution company's Virginia service territory to exceed 1.0% of that company's Virginia peak-load forecast for the previous year. In any case where a prospective customer has submitted a notification form required by 20VAC5-315-30 and that customer's interconnection would cause the total rated generating alternating current capacity of all interconnected net metered generators, as defined in 20VAC5-315-20, within that electric distribution company's service territory to exceed 1.0% of that company's Virginia peak-load forecast for the previous year, the electric distribution company shall, at the time it becomes aware of the fact, send written notification to the prospective customer and to the commission's Division of Energy Regulation that the interconnection is not allowed. In

addition, upon request from any customer, the electric distribution company shall provide to the customer the amount of capacity still available for interconnection pursuant to § 56-594 D of the Code of Virginia.

C. Neither the electric distribution company nor the energy service provider shall impose any charges upon a customer for any interconnection requirements specified by this chapter, except as provided under subdivisions A 5, 6, and 7 of this section, and 20VAC5-315-50 as related to additional metering.

D. A customer shall immediately notify the electric distribution company of any changes in the ownership of, operational responsibility for, or contact information for any of the customer's generators.

20VAC5-315-70. Additional controls and tests.

~~Except as provided in 20VAC5-315-40 A 5 and 6 and 20VAC5-315-50 as related to additional metering, no customer shall be required to pay for additional metering, testing or controls in order to interconnect with the electric distribution company or energy service provider. However, this chapter shall not preclude a customer, an electric distribution company or an energy service provider from installing additional controls or meters, or from conducting additional tests. The expenses associated with these additional meters, tests or equipment shall be borne by the party desiring the additional meters, tests or equipment. A net metering customer's electrical generating system, and each electrical generating system of an agricultural net metering customer, shall meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories. Beyond the requirements set forth in this chapter, and to insure public safety, power quality, and reliability of the supplier's electric distribution system, a net metering customer or agricultural net metering customer whose electrical generating system meets those standards and rules shall bear all reasonable costs of equipment required for the interconnection to the supplier's electric distribution system, including costs, if any, to (i) install additional controls and (ii) perform additional tests.~~

VA.R. Doc. No. R15-4412; Filed June 5, 2015, 6:09 p.m.

GOVERNOR

EXECUTIVE ORDER NUMBER 43 (2015)

Establishment of the Unmanned Systems Commission

Importance of the Issue

The Commonwealth of Virginia is home to the eighth largest concentration of unmanned system firms in the nation at a time when the use of unmanned systems is rapidly expanding. Unmanned systems could provide Virginia with numerous practical benefits: crops could be inspected and maintained using unmanned aerial technologies; traffic jams could be ameliorated by self-driving ground vehicles; and Virginia's waterways could be protected from contamination with advanced unmanned marine systems. As these new and exciting possibilities emerge, Virginia is in a highly competitive position to take the greatest advantage of the industry's development and reap benefits from it.

Virginia has already succeeded in winning a test-site designation from the Federal Aviation Administration to develop unmanned aerial technologies through the Mid-Atlantic Aviation Partnership. In addition, a number of Virginia's higher education institutions are focused on studying and developing the industry. The sector's development will align nicely with areas in which the Commonwealth is already a leader, such as data industries, manufacturing, and military/civilian government sectors.

Virginia stands poised to leverage its unique resources to create an innovation ecosystem that will not only underpin industry development and support the advancement of beneficial applications of unmanned systems of today, but also to provide a foundation for the technologies, cyber security, big data, and manufacturing facilities necessary to create a highly reliable unmanned systems industry for the future. Virginia should be doing all it can to obtain the economic development benefits of this industry's growth, and the creation of this Commission will bring needed focus to how Virginia can strengthen its position in growing the unmanned systems industry.

Composition of the Commission

The Commission will consist of the Secretaries of Technology, Commerce and Trade, Education, Veterans and Defense Affairs, two Representatives from the Virginia Congressional Delegation, and (11) citizen members whose background shall include relevant expertise to be appointed by the Governor and serve at his pleasure. The Governor shall designate a Chairman and Vice Chairman from among the appointed members. The Governor may appoint additional persons to the Commission at his discretion.

Establishment of the Virginia Unmanned Systems Commission

Accordingly, by virtue of the authority vested in me as Governor under Article V of the Constitution of Virginia and under the laws of the Commonwealth, including but not limited to § 2.2-134 and § 2.2-135 of the Code of Virginia, and subject to my continuing and ultimate authority and responsibility to act in such matters, I hereby establish the Virginia Unmanned Systems Commission.

Responsibilities of the Commission

The Commission shall:

1. Identify the state of all unmanned systems industries in Virginia. This review should look comprehensively at the industry, including the supply chain from pre-competitive research and development through production and operation.
2. Identify challenges and needs of the unmanned system industry that may be met with Virginia assets for each domain of unmanned systems (aerial, land, maritime) including but not limited to workforce, research and engineering expertise, testing facilities, manufacturing facilities, and economic development opportunities within the Commonwealth.
3. Provide recommendations that will encourage the development of the unmanned systems industry in Virginia.
4. Develop the value proposition for Virginia that will provide a basis for marketing Virginia to the current unmanned systems industry and that will position Virginia for emerging needs and applications within that industry.

The Commission shall provide an interim report to the Governor of recommendations by November 30, 2015.

The Commission shall also submit an annual report giving its findings, as well as any other reports as either the Commission or the Governor deem necessary.

Commission Staffing and Funding

Necessary staff support for the Commission's work during its continued existence shall be furnished by the Office of the Secretary of Technology and other such agencies and offices as designated by the Governor. An estimated 300 hours of staff time will be required to support the work of the Commission.

Necessary funding to support the Commission and its staff shall be provided from federal funds, private funds, and state funds appropriated for the same purposes as the Commission, as authorized by § 2.2-135 of the Code of Virginia, as well as any other private sources of funding that may be identified. Estimated direct costs for this Commission are \$5000. Commission members shall serve without compensation and

Governor

shall receive reimbursement for expenses incurred in the discharge of their official duties.

The Commission shall serve in an advisory role, in accordance with § 2.2-2100 of the Code of Virginia and shall meet upon the call of the chairman at least three times per year.

Effective Date of the Executive Order

This Executive Order shall be effective upon its signing and shall remain in force and effect until June 12, 2016, unless otherwise amended or rescinded by further executive order.

Given under my hand and under the Seal of the Commonwealth of Virginia, this 12th day of June, 2015.

/s/ Terence R. McAuliffe
Governor

GUIDANCE DOCUMENTS

Sections 2.2-4008 and 2.2-4103 of the Code of Virginia require annual publication in the *Virginia Register* of guidance document lists from state agencies covered by the Administrative Process Act and the Virginia Register Act. A guidance document is defined as "...any document developed by a state agency or staff that provides information or guidance of general applicability to the staff or public to interpret or implement statutes or the agency's rules or regulations..." Agencies are required to maintain a complete, current list of all guidance documents and make the full text of such documents available to the public.

Generally, the format for the guidance document list is: document number (if any), title of document, date issued or last revised, and citation of Virginia Administrative Code regulatory authority or Code of Virginia statutory authority. Questions concerning documents or requests for copies of documents should be directed to the contact person listed by the agency.

NORFOLK STATE UNIVERSITY

Copies of the following documents may be viewed during normal work days from 8 a.m. to 5 p.m. in the Harrison B. Wilson Archives at Norfolk State University, 700 Park Avenue, Norfolk, VA 23504. Copies may be obtained free of charge by contacting Annette Montgomery at telephone (757) 823-2003, FAX (757) 823-2005, or email amontgomery@nsu.edu. The documents are also available online at www.nsu.edu.

Unless otherwise noted, questions regarding the interpretation or implementation of these guidance documents may be directed to Clementine S. Cone, Executive Assistant to the President for University Compliance, telephone (757) 823-8485, FAX (757) 823-2342, or email cscone@nsu.edu.

Guidance Documents:

Teaching Faculty Handbook (5/4/12)

<https://www.nsu.edu/Assets/websites/provost/forms/pdf/Teaching-Faculty-Handbook.pdf>

Graduate Catalogue (6/1/15)

<https://www.nsu.edu/Assets/websites/catalogs/graduate/graduate-catalog.pdf>

NSU Undergraduate Catalogue (6/1/15)

<https://www.nsu.edu/Assets/websites/catalogs/undergraduate/Undergraduate-catalog.pdf>

Questions regarding the interpretation and enforcement of the Teaching Faculty Handbook and the Graduate and Undergraduate Catalogs should be directed to Dr. Mildred Fuller, Vice Provost at (757) 823-8408, or email mkfuller@nsu.edu.

Parking Regulations (6/1/15)

<https://www.nsu.edu/finance/parking/parking-rules-and-regulations>

Safety and Campus Security (10/1/14)

<https://www.nsu.edu/Assets/websites/police/security-booklet/NSU-Security-Booklet.pdf>

Student Handbook (6/1/15)

<https://www.nsu.edu/Assets/websites/student-affairs/student-handbook/NSU-Student-Handbook.pdf>

GENERAL NOTICES/ERRATA

DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

Notice of Periodic Review and Small Business Impact Review

Pursuant to Executive Order 17 (2014) and §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Department of Agriculture and Consumer Services is currently reviewing each of the regulations listed below to determine whether the regulation should be repealed, amended, or retained in its current form. The review of each regulation will be guided by the principles in Executive Order 17 (2014). Public comment is sought on the review of any issue relating to each regulation, including whether the regulation (i) is necessary for the protection of public health, safety, and welfare or for the economical performance of important governmental functions; (ii) minimizes the economic impact on small businesses in a manner consistent with the stated objectives of applicable law; and (iii) is clearly written and easily understandable.

2VAC5-501, Regulations Governing the Cooling, Storing, Sampling and Transporting of Milk

2VAC5-510, Rules and Regulations Governing the Production, Processing, and Sale of Ice Cream, Frozen Desserts, and Similar Products

The comment period begins June 29, 2015, and ends July 20, 2015.

Agency Contact: Robert Trimmer, Dairy Services Program Supervisor, Department of Agriculture and Consumer Services, P.O. Box 1163, Richmond, VA 23218, telephone (804) 786-1452, FAX (804) 371-7792, or email robert.trimmer@vdaacs.virginia.gov.

Comments must include the commenter's name and address (physical or email) information in order to receive a response to the comment from the agency. Following the close of the public comment period, a report of both reviews will be posted on the Town Hall, and a report of the small business impact review will be published in the Virginia Register of Regulations

DEPARTMENT OF BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES

Virginia Center for Behavioral Rehabilitation Variance Approval

Title of Regulation: 12VAC35-115. Regulations to Assure the Rights of Individuals Receiving Services from Providers Licensed, Funded, or Operated by the Department of Behavioral Health and Developmental Services.

Statutory Authority: § 37.2-400 of the Code of Virginia.

Nature of Action: The Department of Behavioral Health and Developmental Services (DBHDS) sought comment on the applications submitted by the DBHDS Virginia Center for Behavioral Rehabilitation for proposed renewal of existing variances to the Regulations to Assure the Rights of Individuals Receiving Services from Providers Licensed, Funded, or Operated by the Department of Behavioral Health and Developmental Services (12VAC35-115).

Agency Decision: The State Human Rights Committee voted on April 17, 2015, to approve the applications for variances from certain requirements of the Regulations to Assure the Rights of Individuals Receiving Services from Providers Licensed, Funded, or Operated by the Department of Behavioral Health and Developmental Services (12VAC35-115).

Contact Information: Deborah Lochart, Director, Office of Human Rights, Department of Behavioral Health and Developmental Services, 1220 East Bank Street, P.O. Box 1797, Richmond, VA 23218-1797, telephone (804) 786-0032, FAX (804) 804-371-2308, or email deb.lochart@dbhds.virginia.gov.

STATE CORPORATION COMMISSION

Bureau of Insurance

AT RICHMOND, JUNE 3, 2015

COMMONWEALTH OF VIRGINIA, ex rel.

STATE CORPORATION COMMISSION

CASE NO. INS-2015-00022

Ex Parte: In the matter of adoption of adjusted prima facie rates for credit life and credit accident and sickness insurance pursuant to §§ 38.2-3725, 38.2-3726, 38.2-3727, and 38.2-3730 of the Code of Virginia

ORDER SCHEDULING HEARING

Pursuant to § 38.2-3730 B of the Code of Virginia ("Code"), the State Corporation Commission ("Commission") is required to conduct a hearing for the purpose of determining the actual loss ratio for credit life and credit accident and sickness insurance and to adjust the prima facie rates, as provided in §§ 38.2-3726 and 38.2-3727 of the Code, by applying the ratio of the actual loss ratio to the loss ratio standard set forth in § 38.2-3725 of the Code to the prima facie rates. These rates are to be effective for the triennium commencing January 1, 2016.

The adjusted prima facie rates have been calculated and proposed on behalf of and by the Bureau of Insurance ("Bureau") in accordance with the provisions of Chapter 37.1 of Title 38.2 of the Code (§§ 38.2-3717 et seq.) and are attached hereto.

Accordingly, IT IS ORDERED THAT:

- (1) This matter is docketed and assigned Case No. INS-2015-00022.
- (2) The adjusted prima facie rates that have been calculated and proposed on behalf of and by the Bureau in accordance with the provisions of Chapter 37.1 of Title 38.2 of the Code (§§ 38.2-3717 et seq.), which are attached hereto, are made a part hereof.
- (3) In accordance with Rule 5 VAC 5-20-120 A, Assignment, of the Commission's Rules of Practice and Procedure, 5 VAC 5-20-10 et seq. ("Rules of Practice"), a hearing examiner hereby is appointed to conduct all further proceedings, including hearings, in this matter on behalf of the Commission and to file a final report.
- (4) Pursuant to § 38.2-3730 B of the Code, the Commission, through its hearing examiner, shall conduct a hearing on July 14, 2015, at 10 a.m. in its courtroom, Tyler Building, 1300 East Main Street, Second Floor, Richmond, Virginia 23219.
- (5) On or before June 23, 2015, the Bureau shall prefile any written reports or other data in support of the proposed adjusted prima facie rates with the Clerk of the Commission and shall refer to Case No. INS-2015-00022.
- (6) On or before June 30, 2015, any person who expects to participate in the hearing as a respondent as provided by Rule 5 VAC 5-20-80 B, Participation as a respondent, of the Rules of Practice, shall file a notice of participation in accordance with the provisions of 5 VAC 5-20-80 B. If not filed electronically, an original and fifteen (15) copies of such notice of participation shall be filed with the Clerk of the Commission. All filings shall refer to Case No. INS-2015-00022.
- (7) On or before July 7, 2015, any person previously filing a notice of participation who wishes to participate in the hearing as a respondent shall file the testimony and exhibits of each witness expected to present direct testimony to establish the respondent's case. If not filed electronically, an original and fifteen (15) copies of such testimony and exhibits shall be filed with the Clerk of the Commission. All filings shall refer to Case No. INS-2015-00022, and copies thereof simultaneously shall be delivered to any respondent requesting the same.
- (8) All interested persons who desire to file written comments in support of or in opposition to the proposed adjusted prima facie rates shall file such comments on or before July 7, 2015, in writing with Joel H. Peck, Clerk, State Corporation Commission, c/o Document Control Center, P.O. Box 2118, Richmond, Virginia 23218-2118, and shall refer to Case No. INS-2015-00022. On or before July 7, 2015, any interested person desiring to submit comments electronically in this case may do so by

following the instructions found on the Commission's website: <http://www.scc.virginia.gov/case>.

(9) Any public witness who desires to make a statement at the hearing on his own behalf, either for or against the proposed adjusted prima facie rates for credit life and credit accident and sickness insurance, but not otherwise participate in the hearing, need only appear in the Commission's courtroom at 9:45 a.m. on July 14, 2015, and complete a notice of appearance form that shall be provided by the Commission. In order to accommodate as many public witnesses as possible, the Commission asks that comments be limited to five minutes by each witness.

(10) An attested copy of this Order Scheduling Hearing shall be sent by the Bureau to every insurance company licensed by the Bureau to transact the business of credit life and credit accident and sickness insurance in the Commonwealth of Virginia, and to all other interested persons. The Bureau shall file in the record of this proceeding an affidavit evidencing compliance with this Order.

(11) The Commission's Division of Information Resources shall make available this Order and the attached proposed adjusted rates on the Commission's website: <http://www.scc.virginia.gov/case>.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to: Kiva Bland Pierce, Assistant Attorney General, Division of Consumer Counsel, Office of the Attorney General, 900 East Main Street, Second Floor, Richmond, Virginia 23219; and a copy hereof shall be delivered to the Commission's Office of General Counsel and the Bureau of Insurance in the care of Deputy Commissioner Athelia P. Battle.

STATE BOARD OF SOCIAL SERVICES

Small Business Impact Review - Report of Findings

Pursuant to § 2.2-4007.1 of the Code of Virginia, the State Board of Social Services conducted a small business impact review of **22VAC40-680, Virginia Energy Assistance Program - Low Income Home Energy Assistance Program (LIHEAP)**, and determined that this regulation should be retained in its current form. The State Board of Social Services is publishing its report of findings dated June 11, 2015, to support this decision in accordance with § 2.2-4007.1 F of the Code of Virginia.

Because this regulation makes revenue available to over 600 vendors, the impact of the regulation on small business is positive. There were no complaints or comments received from the public. The regulation provides eligible Home Energy Assistance Program (EAP) vendors, which includes vendors from the small business community, access to revenue made available through the federally funded

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LIHEAP. Vendors, in most cases, receive their funds directly from the Department of Social Services (DSS), so they know they will be paid and the EAP benefits will not be used by the recipient for other purposes. The regulation is not complex and does not overlap, duplicate, or conflict with other federal or state laws or regulations. The last evaluation of this regulation occurred in 2011. The biennial report to the General Assembly on the effectiveness of the EAP concludes that the program compliments other private and nonprofit energy programs, and the services are not duplicative. Business entities that provide EAP goods and services are eligible to participate as vendors in the EAP. Payments to vendors are determined by their respective products, self-designated service areas, and by customer selection. There is no need to amend or repeal the regulation to minimize the economic impact on small businesses.

Contact Information: Denise Surber, Energy Assistance Program Consultant, Department of Social Services, 804 East Main Street, Richmond, VA 23219, telephone (804) 726-7386, FAX (804) 726-7358, or email denise.t.surber@dss.virginia.gov.

VIRGINIA WASTE MANAGEMENT BOARD

Small Business Impact Review - Report of Findings

Pursuant to § 2.2-4007.1 of the Code of Virginia, the Virginia Waste Management Board conducted a small business impact review of **9VAC20-130, Solid Waste Planning and Recycling Regulations**, and determined that this regulation should be retained in its current form. The Virginia Waste Management Board is publishing its report of findings dated May 20, 2015, to support this decision in accordance with § 2.2-4007.1 F of the Code of Virginia.

The agency believes this regulation continues to be needed. It establishes requirements for the formation of solid waste management planning units and for the development of solid waste management plans. These plans address the management of solid waste and the recycling of solid waste within the solid waste management planning unit. These plans promote source reduction, reuse, and recycling of materials, thereby reducing the amount of solid waste that needs to be disposed of in landfills.

During the public comment period for this periodic review only one comment was submitted. The Central Virginia Waste Management Authority (CVWMA) submitted a comment supporting the review of the regulation. CVWMA however did not provide any suggestions for changes to the regulation.

As part of this review, the agency considered the impact this regulation has on small businesses. The regulation does not directly impact small businesses. This regulation provides local governments and solid waste management planning units with details that need to be included in solid waste

management plans. All entities generating solid waste may be required to follow waste management practices established by the solid waste management planning units. The solid waste management planning unit has the ability to adopt plans that include measures that minimize impacts to small businesses.

The agency also considered the extent to which the regulation overlaps, duplicates, or conflicts with federal or state law or regulation. This regulation is a state only regulation and there is no equivalent federal regulation. This regulation does overlap to an extent with the Solid Waste Management Regulation (9VAC20-81). Both regulations address solid waste and the need to properly manage solid waste in permitted facilities. Some facilities that manage solid waste receive permits from the department that are issued through the Solid Waste Management Regulation (9VAC20-81).

Since initially adopted, the regulation has been revised numerous times to address various issues. This regulation was last amended in 2012 to revise the frequency of the recycling rate report for some localities. This regulation was also updated in 2011 to revise regulatory citations referencing the Solid Waste Management Regulations. Revisions were made in 2007 to the regulation to change the calculation of the mandatory recycling rate, the formation and dissolution of planning regions, and to remove references to the Solid Waste Information and Assessment Program. Revisions in 2001 were made to make the regulation consistent with state statute and legislation passed during the 1999 Session of the General Assembly.

The department has determined that the regulation should be retained. The agency plans to discuss this regulation with stakeholders in the near future to identify potential changes that would increase the clarity of this regulation, while maintaining the objectives of applicable law. Any changes to the regulation would be made through a regulatory action separate from this periodic review.

Contact Information: Melissa Porterfield, Office of Regulatory Affairs, Department of Environmental Quality, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4238, FAX (804) 698-4019, or email melissa.porterfield@deq.virginia.gov.

STATE WATER CONTROL BOARD

Total Maximum Daily Load for Accotink Creek and Long Branch

The Department of Environmental Quality (DEQ) seeks written and oral comments from interested persons on the draft stressor identification analysis in support of the development of total maximum daily loads (TMDLs) for Accotink Creek and Long Branch in the Accotink Creek watershed in Fairfax County. These streams are listed on the 2012 § 303(d) TMDL Priority List and Report as impaired due to violations of the state's water quality standards for the

aquatic life use due to poor health of the benthic macroinvertebrate communities.

Section 303(d) of the Clean Water Act and § 62.1-44.19:7 C of the State Water Control Law require DEQ to develop

TMDLs for pollutants responsible for each impaired water contained in Virginia's § 303(d) TMDL Priority List and Report.

| Stream Name | Location | Impairment | Length (miles) | Upstream Limit | Downstream Limit |
|----------------|-----------------------------------|---|----------------|--|---------------------------------|
| Accotink Creek | Fairfax County | Aquatic Life Use Benthic Macroinvertebrates | 9.92 | Lake Accotink | Tidal waters of Accotink Bay |
| Accotink Creek | City of Fairfax Fairfax County | Aquatic Life Use Benthic Macroinvertebrates | 6.2 | Headwaters of Accotink Creek | Lake Accotink |
| Long Branch | Fairfax County | Aquatic Life Use Benthic Macroinvertebrates | 2.24 | Unnamed tributary at the Route 651 bridge | Accotink Creek |

The second public meeting will focus on the results of the draft stressor identification analysis, which identifies the stressors to the benthic communities in the Accotink Creek watershed. The meeting will be held on Monday, July 6, 2015, 6:30 p.m., Kings Park Library - Meeting Room, 9000 Burke Lake Road, Burke, VA 22015-1683. In case of inclement weather, the alternate meeting date is Wednesday, July 22, 2015, 6:30 p.m., Kings Park Library - Meeting Room, 9000 Burke Lake Road, Burke, VA 22015-1683. The public comment period will begin July 6, 2015, and end Wednesday, August 5, 2015.

A component of a TMDL is the wasteload allocations (WLAs); therefore, this notice is provided pursuant to § 2.2-4006 A 14 of the Administrative Process Act for any future adoption of the TMDLs associated WLAs.

Information on the development of the TMDLs for the impairments is available upon request. Questions or information requests should be addressed to the DEQ contact person listed below. Please note, all written comments should include the name, address, and telephone number of the person submitting the comments and should be sent to Jennifer Carlson, Virginia Department of Environmental Quality, 13901 Crown Court, Woodbridge, VA 22193, email jennifer.carlson@deq.virginia.gov, or telephone (703) 583-3859.

Proposed Enforcement Action for Broadnax, LLC

An enforcement action has been proposed for Broadnax, LLC for alleged violations of the State Water Control Law at the Brabble Shores Subdivision in Chesapeake, Virginia. A description of the proposed action is available at the Department of Environmental Quality office named below or online at www.deq.virginia.gov. Mr. Robin Schuhmann will accept comments by email at

robin.schuhmann@deq.virginia.gov, FAX at (757) 518-2009, or postal mail at Department of Environmental Quality, Tidewater Regional Office, 5636 Southern Boulevard, Virginia Beach, VA 23462, from June 29, 2015, through July 29, 2015.

Proposed Consent Order for the City of Lynchburg

An enforcement action has been proposed for the City of Lynchburg for violations of the State Water Control Law and regulations in the City of Lynchburg. The State Water Control Board proposes to issue a consent order to the City of Lynchburg to resolve violations regarding combined sewer overflows at the City's Regional Wastewater Treatment Plant and Combined Sewer Collection System. A description of the proposed action is available at the Department of Environmental Quality office named below or online at www.deq.virginia.gov. G. Marvin Booth, III will accept comments by email at marvin.booth@deq.virginia.gov, FAX at (434) 582-5125, or postal mail at Department of Environmental Quality, Blue Ridge Regional Office, 7705 Timberlake Road, Lynchburg, VA 24502 from June 29, 2015, through July 30, 2015.

Proposed Consent Order for the Stafford County Board of Supervisors

An enforcement action has been proposed for the Stafford County Board of Supervisors. The consent order describes a settlement to resolve violations of State Water Control Law and the applicable regulations regarding the Sanitary Sewer Collection Systems associated with the Little Falls Run Wastewater Treatment Plant and the Aquia Wastewater Treatment Facility. A description of the proposed action is available at the Department of Environmental Quality office named below or online at www.deq.virginia.gov. Daniel Burstein will accept comments by email at daniel.burstein@deq.virginia.gov, FAX at (703) 583-3821, or

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postal mail at Department of Environmental Quality, Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193, from June 30, 2015, through July 30, 2015.

VIRGINIA CODE COMMISSION

Notice to State Agencies

Contact Information: *Mailing Address:* Virginia Code Commission, General Assembly Building, 201 North 9th Street, 2nd Floor, Richmond, VA 23219; *Telephone:* Voice (804) 786-3591; *Email:* varegs@dls.virginia.gov.

Meeting Notices: Section 2.2-3707 C of the Code of Virginia requires state agencies to post meeting notices on their websites and on the Commonwealth Calendar at <http://www.virginia.gov/connect/commonwealth-calendar>.

Cumulative Table of Virginia Administrative Code Sections Adopted, Amended, or Repealed: A table listing regulation sections that have been amended, added, or repealed in the *Virginia Register of Regulations* since the regulations were originally published or last supplemented in the print version of the Virginia Administrative Code is available at <http://register.dls.virginia.gov/documents/cumultab.pdf>.

Filing Material for Publication in the *Virginia Register of Regulations*: Agencies use the Regulation Information System (RIS) to file regulations and related items for publication in the *Virginia Register of Regulations*. The Registrar's office works closely with the Department of Planning and Budget (DPB) to coordinate the system with the Virginia Regulatory Town Hall. RIS and Town Hall complement and enhance one another by sharing pertinent regulatory information.

ERRATA

STATE BOARD OF HEALTH

Title of Regulation: 12VAC5-71. Regulations Governing Virginia Newborn Screening Services (amending 12VAC5-71-30).

Publication: 31:18 VA.R. 1574-1575 May 4, 2015

Correction to Final Regulation:

Page 1574, Effective Date, change the effective date to June 4, 2015

VA.R. Doc. No. R13-3569; Filed June 10, 2015, 12:52 p.m.