

## **SURFACE WATER STANDARDS WITH GENERAL, STATEWIDE APPLICATION**

### **9 VAC 25-260-5. Definitions.**

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"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). Includes sections 390 subsections 1, 2, 3, 4, 5, and 6, section 410 subsections 1, 1b, 1d, 1f and 1o, section 415 subsections 5 and 5a, section 440 subsections 1 and 1a, section 520 subsections 2, 3, 3a, 3b and 3e, section 530 subsection 1 of this chapter. 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.

"Designated uses" means those uses specified in water quality standards for each water body 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.

"Existing uses" means those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.

"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 on the whole are maintained and lethality is prevented.

"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 9 VAC 25-260-10 ~~G~~ 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 such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the State Water Control Law (§ 62.1-44.2 et seq. of the Code of Virginia) and the federal Clean Water Act (33 USC § 1251 et seq.).

**9 VAC 25-260-10. Designation of uses.**

A. All State waters, including wetlands, are designated for the following uses: recreational uses, e.g., swimming and boating; the propagation and growth of a balanced, indigenous population of aquatic life, including game fish, which might reasonably be expected to inhabit them; wildlife; and the production of edible and marketable natural resources, e.g., fish and shellfish.

Subcategories of the propagation and growth of a balanced indigenous population of aquatic life, including game fish designated use for waters in the Chesapeake Bay and its tidal tributaries are listed in subsection B of this section.

B. Migratory Fish Spawning and Nursery Designated Use: waters in the Chesapeake Bay and its tidal tributaries that protect the survival, growth and propagation of the early life stages of [a balanced, indigenous population of] anadromous, semi-anadromous[, catadromous] and tidal-fresh resident fish species inhabiting spawning and nursery grounds. This designated use extends from the end of tidal waters to the downriver end of spawning and nursery habitats that have been determined through a composite of all targeted anadromous and semi-anadromous fish species' spawning and nursery habitats (see boundaries in U.S. Environmental Protection Agency. 2004. *Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability 2004 Addendum*. Chesapeake Bay Program Office, Annapolis, Maryland). This designated use extends horizontally from the shoreline of the body of water to the adjacent shoreline, and

extends down through the water column to the bottom water-sediment interface. This use applies February 1 through May 31 and applies in addition to the open-water use described in this subsection.

Shallow-Water Submerged Aquatic Vegetation Designated Use: waters in the Chesapeake Bay and its tidal tributaries that support the survival, growth and propagation of submerged aquatic vegetation (rooted, underwater bay grasses). This use applies April 1 through October 31 in tidal-fresh, oligohaline and mesohaline Chesapeake Bay Program segments, and March 1 through November 30 in polyhaline Chesapeake Bay Program segments and applies in addition to the open-water use described in this subsection.

Open-Water Aquatic Life Designated Use: waters in the Chesapeake Bay and its tidal tributaries that protect the survival, growth and propagation of [a] balanced, indigenous [~~populations~~ population] of aquatic life inhabiting open-water habitats. This designated use applies year-round but the vertical boundaries change seasonally. October 1 - May 31, the open water aquatic life use extends horizontally from the shoreline at mean low water, to the adjacent shoreline, and extending through the water column to the bottom water-sediment interface. June 1 - September 30, if a pycnocline is present and, in combination with bottom bathymetry and water column circulation patterns, presents a barrier to oxygen replenishment of deeper waters, this designated use extends down into the water column only as far as the upper boundary of the pycnocline. June 1 - September 30, if a pycnocline is present but other physical circulation patterns (such as influx of oxygen rich oceanic bottom waters) provide for oxygen replenishment of deeper waters, the open-water aquatic life designated use extends down into the bottom water-sediment interface (see boundaries in U.S. Environmental Protection Agency, 2004. *Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability 2004 Addendum*. Chesapeake Bay Program Office, Annapolis, Maryland). This designated use includes the migratory fish spawning and nursery and shallow-water submerged aquatic vegetation uses.

Deep-Water Aquatic Life Designated Use: waters in the Chesapeake Bay and its tidal tributaries that protect the survival and growth of [a] balanced, indigenous [~~populations~~ population] of aquatic life inhabiting deep-water habitats. This designated use extends to the tidally influenced waters located between the upper and lower boundaries of the pycnocline where, in combination with bottom bathymetry and water circulation patterns, a pycnocline is present and presents a barrier to oxygen replenishment of deeper waters. In some areas, the deep-water designated use extends from the upper boundary of the pycnocline down to the bottom water-sediment interface (see boundaries in U.S. Environmental Protection

Agency. 2004. Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability 2004

Addendum. Chesapeake Bay Program Office, Annapolis, Maryland). This use applies June 1 through September 30.

Deep-Channel Seasonal Refuge Designated Use: waters in the Chesapeake Bay and its tidal tributaries that protect the survival of [a] balanced, indigenous [populations-population] of benthic infauna and epifauna inhabiting deep-channel habitats. This designated use extends to the tidally influenced waters at depths greater than the lower boundary of the pycnocline in areas where, in combination with bottom bathymetry and water circulation patterns, the pycnocline presents a barrier to oxygen replenishment of deeper waters (see boundaries in U.S. Environmental Protection Agency. 2004. Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability 2004 Addendum. Chesapeake Bay Program Office, Annapolis, Maryland). This use applies June 1 through September 30.

~~BC.~~ In designating uses of a water body and the appropriate criteria for those uses, the board shall take into consideration the water quality standards of downstream waters and shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream waters.

~~CD.~~ The board may adopt subcategories of a use and set the appropriate criteria to reflect varying needs of such subcategories of uses, for instance, to differentiate between cold water (trout streams) and warm water fisheries.

~~DE.~~ At a minimum, uses are deemed attainable if they can be achieved by the imposition of effluent limits required under §§ 301(b) and 306 of the Clean Water Act and cost-effective and reasonable best management practices for nonpoint source control.

~~EF.~~ Prior to adding or removing any use, or establishing subcategories of a use, the board shall provide notice and an opportunity for a public hearing under the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia).

~~FG.~~ The board may adopt seasonal uses as an alternative to reclassifying a water body or segment thereof to uses requiring less stringent water quality criteria. If seasonal uses are adopted, water quality criteria should be adjusted to reflect the seasonal uses; however, such criteria shall not preclude the attainment and maintenance of a more protective use in another season.

~~GH.~~ The board may remove a designated use which is not an existing use, or establish subcategories of a use, if the board can demonstrate that attaining the designated use is not feasible because:

1. Naturally occurring pollutant concentrations prevent the attainment of the use;
2. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use unless these

conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating state water conservation requirements to enable uses to be met;

3. Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place;

4. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use;

5. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or

6. Controls more stringent than those required by §§ 301(b) and 306 of the Clean Water Act would result in substantial and widespread economic and social impact.

~~H~~ I. The board may not remove designated uses if:

1. They are existing uses, unless a use requiring more stringent criteria is added; or
2. Such uses will be attained by implementing effluent limits required under §§ 301b and 306 of the Clean Water Act and by implementing cost-effective and reasonable best management practices for nonpoint source control.

~~I~~ J. Where existing water quality standards specify designated uses less than those which are presently being attained, the board shall revise its standards to reflect the uses actually being attained.

~~J~~ K. The board must conduct a use attainability analysis whenever:

1. The board designates or has designated uses that do not include the uses specified in § 101(a)(2) of the Clean Water Act, or
2. The board wishes to remove a designated use that is specified in § 101(a)(2) of the Clean Water Act or to adopt subcategories of uses specified in § 101(a)(2) of the Clean Water Act which require less stringent criteria.

~~K~~ L. The board is not required to conduct a use attainability analysis under this chapter whenever designating uses which include those specified in subsection A of this section.

**9 VAC 25-260-50. Numerical criteria for dissolved oxygen, pH, and maximum temperature.\*\*\***

CLASS	DESCRIPTION OF	DISSOLVED OXYGEN	pH	Maximum Temp. (°C)
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	WATERS	(mg/L)****			
		Min.	Daily Avg.		
I	Open Ocean	5.0	--	6.0-9.0	--
II	<del>Estuarine</del> Tidal Waters in the Chowan Basin and the Atlantic Ocean Basin Tidal <del>Water-Coastal Zone to Fall</del> Line	4.0	5.0	6.0-9.0	--
II	Tidal Waters in the Chesapeake Bay and its tidal tributaries	see 9 VAC 25-260-185		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	*	*	4.3-9.0*	**

\*This classification recognizes that the natural quality of these waters may fall outside of the ranges for D.O. and pH set forth above as water quality criteria; therefore, on a case-by-case basis, criteria for specific Class VII waters can be developed which reflect the natural quality of the waterbody. Virginia Pollutant Discharge Elimination System limitations in Class VII waters shall meet pH of 6.0 - 9.0.

\*\*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.)

**PART II**

**STANDARDS WITH MORE SPECIFIC APPLICATION**

**9 VAC 25-260-185 Criteria to protect designated uses from the impacts of nutrients and suspended sediment in the Chesapeake Bay and its tidal tributaries.**

A. Dissolved Oxygen

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

[1 = See subsection aa of 9 VAC 25-260-310 for site specific seasonal open-water dissolved oxygen criteria applicable to the tidal Mattaponi and Pamunkey Rivers and their tidal tributaries.]

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

B. Submerged Aquatic Vegetation and Water Clarity

If the submerged aquatic vegetation (SAV) acres in this subsection are met in any individual Chesapeake Bay Program segment as described in subsection D of this section, then the shallow-water submerged aquatic vegetation use is met in that segment. If the SAV acres in this subsection are not met in any individual Chesapeake Bay Program segment, then the water clarity criteria shall apply to the water clarity acres in that segment. If these water clarity criteria are met to the bottom water-sediment interface for the number of water clarity acres in that segment, then the shallow-water submerged aquatic vegetation use is met; regardless of the number of acres of SAV in that segment.



<u>Designated Use</u>	<u>Chesapeake Bay Program Segment</u>	<u>SAV Acres<sup>1</sup></u>	<u>Water Clarity Criteria (percent light-through-water)<sup>2</sup></u>	<u>Water Clarity Acres<sup>1</sup></u>	<u>Temporal Application</u>
<u>Shallow-Water Submerged Aquatic Vegetation Use</u>	<u>CB5MH</u>	<u>7,633</u>	<u>22%</u>	<u>14,514</u>	<u>April 1 - October 31</u>
	<u>CB6PH</u>	<u>1,267</u>	<u>22%</u>	<u>3,168</u>	<u>March 1 - November 30</u>
	<u>CB7PH</u>	<u>15,107</u>	<u>22%</u>	<u>34,085</u>	<u>March 1 - November 30</u>
	<u>CB8PH</u>	<u>11</u>	<u>22%</u>	<u>28</u>	<u>March 1 - November 30</u>
	<u>POTTF</u>	<u>2,093</u>	<u>13%</u>	<u>5,233</u>	<u>April 1 - October 31</u>
	<u>POTOH</u>	<u>1,503</u>	<u>13%</u>	<u>3,758</u>	<u>April 1 - October 31</u>
	<u>POTMH</u>	<u>4,250</u>	<u>22%</u>	<u>10,625</u>	<u>April 1 - October 31</u>
	<u>RPPTF</u>	<u>66</u>	<u>13%</u>	<u>165</u>	<u>April 1 - October 31</u>
	<u>RPPOH</u>	<u>0</u>	<u>-</u>	<u>0</u>	<u>-</u>
	<u>RPPMH</u>	<u>1700</u>	<u>22%</u>	<u>5000</u>	<u>April 1 - October 31</u>
	<u>CRRMH</u>	<u>768</u>	<u>22%</u>	<u>1,920</u>	<u>April 1 - October 31</u>
	<u>PIAMH</u>	<u>3,479</u>	<u>22%</u>	<u>8,014</u>	<u>April 1 - October 31</u>
	<u>MPNTF</u>	<u>85</u>	<u>13%</u>	<u>213</u>	<u>April 1 - October 31</u>
	<u>MPNOH</u>	<u>0</u>	<u>-</u>	<u>0</u>	<u>-</u>
	<u>PMKTF</u>	<u>187</u>	<u>13%</u>	<u>468</u>	<u>April 1 - October 31</u>
	<u>PMKOH</u>	<u>0</u>	<u>-</u>	<u>0</u>	<u>-</u>
	<u>YRKMH</u>	<u>239</u>	<u>22%</u>	<u>598</u>	<u>April 1 - October 31</u>
	<u>YRKPH</u>	<u>2,793</u>	<u>22%</u>	<u>6,982</u>	<u>March 1 - November 30</u>
	<u>MOBPH</u>	<u>15,901</u>	<u>22%</u>	<u>33,990</u>	<u>March 1 - November 30</u>
	<u>JMSTF2</u>	<u>200</u>	<u>13%</u>	<u>500</u>	<u>April 1 - October 31</u>
	<u>JMSTF1</u>	<u>1000</u>	<u>13%</u>	<u>2500</u>	<u>April 1 - October 31</u>
<u>APPTF</u>	<u>379</u>	<u>13%</u>	<u>948</u>	<u>April 1 - October 31</u>	

<u>JMSOH</u>	<u>15</u>	<u>13%</u>	<u>38</u>	<u>April 1 - October 31</u>
<u>CHKOH</u>	<u>535</u>	<u>13%</u>	<u>1,338</u>	<u>April 1 - October 31</u>
<u>JMSMH</u>	<u>200</u>	<u>22%</u>	<u>500</u>	<u>April 1 - October 31</u>
<u>JMSPH</u>	<u>300</u>	<u>22%</u>	<u>750</u>	<u>March 1 - November 30</u>
<u>WBEMH</u>	<u>0</u>	<u>:</u>	<u>0</u>	<u>:</u>
<u>SBEMH</u>	<u>0</u>	<u>:</u>	<u>0</u>	<u>:</u>
<u>EBEMH</u>	<u>0</u>	<u>:</u>	<u>0</u>	<u>:</u>
<u>LAFMH</u>	<u>0</u>	<u>:</u>	<u>0</u>	<u>:</u>
<u>ELIPH</u>	<u>0</u>	<u>:</u>	<u>0</u>	<u>:</u>
<u>LYNPH</u>	<u>107</u>	<u>22%</u>	<u>268</u>	<u>March 1 - November 30</u>
<u>POCOH</u>	<u>0</u>	<u>:</u>	<u>0</u>	<u>:</u>
<u>POCMH</u>	<u>4,066</u>	<u>22%</u>	<u>9,368</u>	<u>April 1 - October 31</u>
<u>TANMH</u>	<u>13,579</u>	<u>22%</u>	<u>22,064</u>	<u>April 1 - October 31</u>

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

2 = Percent 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

<u>Designated Use</u>	<u>Chlorophyll a Narrative Criterion<sup>[1]</sup></u>	<u>Temporal Application</u>
<u>Open Water</u>	<p><u>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.</u></p>	<p><b><u>March 1 - September 30</u></b></p>

[1 = See subsection bb of 9 VAC 25-260-310 for site specific seasonal open water chlorophyll a numerical criteria applicable to 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. Chesapeake Bay Program, Annapolis, Maryland 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.

<u>Chesapeake Bay Segment</u>	<u>Segment</u>	<u>Chesapeake Bay Segment</u>	<u>Segment</u>
<u>Description</u>	<u>Name</u> <sup>1</sup>	<u>[Description</u>	<u>Name</u> <sup>1</sup>
		<u>Description]</u>	
<u>Lower Central Chesapeake Bay</u>	<u>CB5MH</u>	<u>Mobjack Bay</u>	<u>MOBPH</u>
<u>Western Lower Chesapeake Bay</u>	<u>CB6PH</u>	<u>Upper Tidal Fresh James River</u>	<u>JMSTF2</u>
<u>Eastern Lower Chesapeake Bay</u>	<u>CB7PH</u>	<u>Lower Tidal Fresh James River</u>	<u>JMSTF1</u>
<u>Mouth of the Chesapeake Bay</u>	<u>CB8PH</u>	<u>Appomattox River</u>	<u>APPTF</u>
<u>Upper Potomac River</u>	<u>POTTF</u>	<u>Middle James River</u>	<u>JMSOH</u>
<u>Middle Potomac River</u>	<u>POTOH</u>	<u>Chickahominy River</u>	<u>CHKOH</u>
<u>Lower Potomac River</u>	<u>POTMH</u>	<u>Lower James River</u>	<u>JMSMH</u>
<u>Upper Rappahannock River</u>	<u>RPPTF</u>	<u>Mouth of the James River</u>	<u>JMSPH</u>
<u>Middle Rappahannock River</u>	<u>RPPOH</u>	<u>Western Branch Elizabeth River</u>	<u>WBEMH</u>
<u>Lower Rappahannock River</u>	<u>RPPMH</u>	<u>Southern Branch Elizabeth River</u>	<u>SBEMH</u>
<u>Corrotoman River</u>	<u>CRRMH</u>	<u>Eastern Branch Elizabeth River</u>	<u>EBEMH</u>
<u>Piankatank River</u>	<u>PIAMH</u>	<u>Lafayette River</u>	<u>LAFMH</u>
<u>Upper Mattaponi River</u>	<u>MPNTF</u>	<u>Mouth of the Elizabeth River</u>	<u>ELIPH</u>
<u>Lower Mattaponi River</u>	<u>MPNOH</u>	<u>Lynnhaven River</u>	<u>LYNPH</u>
<u>Upper Pamunkey River</u>	<u>PMKTF</u>	<u>Middle Pocomoke River</u>	<u>POCOH</u>
<u>Lower Pamunkey River</u>	<u>PMKOH</u>	<u>Lower Pocomoke River</u>	<u>POCMH</u>
<u>Middle York River</u>	<u>YRKMH</u>	<u>Tangier Sound</u>	<u>TANMH</u>
<u>Lower York River</u>	<u>YRKPH</u>		

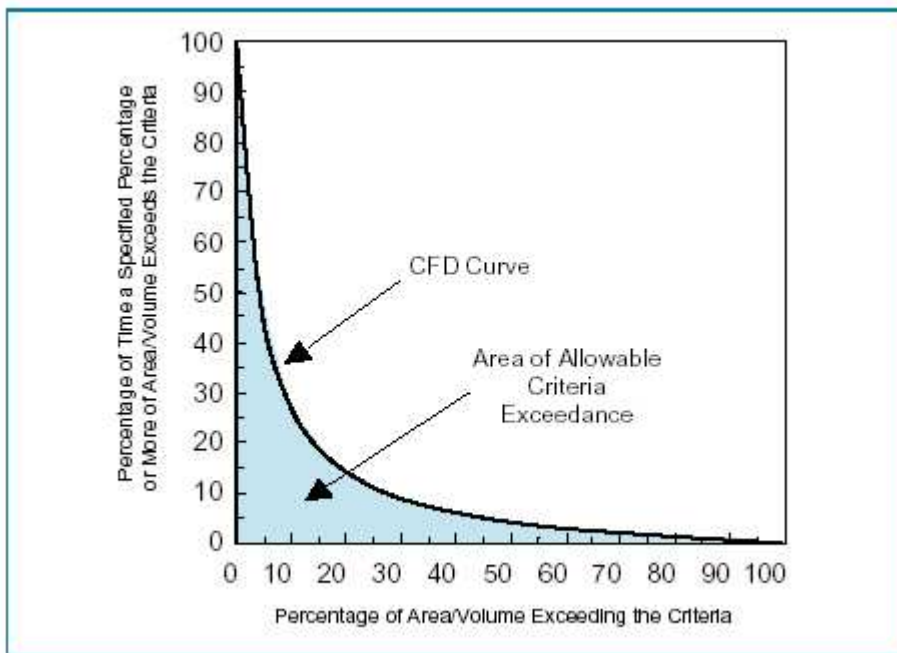
1=First three letters of segment name represent Chesapeake Bay segment description, letters four and five represent the salinity regime of that segment (TF = Tidal Fresh, OH = Oligohaline, MH = Mesohaline and PH = Polyhaline) and a sixth space is reserved for subdivisions of that segment.

2. The assessment period shall be the most recent three consecutive years. When three consecutive years of data are not available, a minimum of three years within the most recent five years 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. If no reference curve is published, the cumulative frequency distribution reference curve in Figure 1, which represents 10% allowable exceedences equally distributed between time and space, shall be the applicable reference curve. An exception to this requirement is in measuring attainment of the SAV acres, which are compared directly to the criteria.

Figure 1.



**[9 VAC 25-260-186 Virginia Pollutant Discharge Elimination System Permits and Schedules of Compliance]**

[4. A] As deemed necessary to meet the requirements of [this section 9 VAC 25-260-185], the board shall issue or modify Virginia Pollutant Discharge Elimination System permits for point source dischargers located throughout the tidal and non-tidal sections of the following river basins: Potomac (sections 390 and 400 of this chapter), James (sections 410, 415, 420 and 430 of this chapter), Rappahannock (section 440 of this chapter), York (section 530 of this chapter) and Chesapeake Bay/Small Coastal Basins (subsections 2 - 3g of section 520 of this chapter).

[B. National Pollutant Discharge Elimination System permits issued by permitting authorities with the Chesapeake Bay watershed may include a compliance schedule in accordance with implementing regulations requiring compliance as soon

as possible with nutrient load limitations assigned to individual dischargers.]

## **PART VIII**

### **NUTRIENT ENRICHED WATERS**

#### **9 VAC 25-260-330. Purpose.**

The Board recognizes that nutrients are contributing to undesirable growths of aquatic plant life in surface waters of the Commonwealth. This standard establishes a designation of "nutrient enriched waters". Designations of surface waters of the Commonwealth as "nutrient enriched waters" are determined by the Board based upon an evaluation of the historical water quality data for one or more of the following indicators of nutrient enrichment: chlorophyll "a" concentrations, dissolved oxygen fluctuations, and concentrations of total phosphorus.

#### **9 VAC 25-260-340. (Repealed.)**

#### **9 VAC 25-260-350. Designation of nutrient enriched waters.**

The following state waters are hereby designated as "nutrient enriched waters":

1. Smith Mountain Lake and all tributaries\* of the impoundment upstream to their headwaters;
2. Lake Chesdin from its dam upstream to where the Route 360 bridge (Goodes Bridge) crosses the Appomattox River, including all tributaries to their headwaters that enter between the dam and the Route 360 bridge;
3. South Fork Rivanna Reservoir and all tributaries of the impoundment upstream to their headwaters;
4. New River and its tributaries, except Peak Creek above Interstate 81, from Claytor Dam upstream to Big Reed Island Creek (Claytor Lake.)
5. Peak Creek from its headwaters to its mouth (confluence with Claytor Lake), including all tributaries to their headwaters;
6. ~~Aquia Creek from its headwaters to the state line;~~ (Repealed.)
7. ~~Fourmile Run from its headwaters to the state line;~~ (Repealed.)
8. ~~Hunting Creek from its headwaters to the state line;~~ (Repealed.)
9. ~~Little Hunting Creek from its headwaters to the state line;~~ (Repealed.)
10. ~~Gunston Cove from its headwaters to the state line;~~ (Repealed.)

11. ~~Belmont and Occoquan Bays from their headwaters to the state line;~~(Repealed.)
12. ~~Potomac Creek from its headwaters to the state line;~~(Repealed.)
13. ~~Neabsco Creek from its headwaters to the state line;~~(Repealed.)
14. ~~Williams Creek from its headwaters to its confluence with Lower Upper Machodoc Creek;~~(Repealed.)
15. ~~Tidal freshwater Rappahannock River from the fall line to Buoy 44, near Leedstown, Virginia, including all tributaries to their headwaters that enter the tidal freshwater Rappahannock River;~~(Repealed.)
16. ~~Estuarine portion of the Rappahannock River from Buoy 44, near Leedstown, Virginia, to the mouth of the Rappahannock River (Buoy 6), including all tributaries to their headwaters that enter the estuarine portion of the Rappahannock River;~~(Repealed.)
17. ~~Estuarine portion of the Mattaponi River from Clifton, Virginia, and estuarine portion of the Pamunkey River from Sweet Hall Landing, Virginia to West Point, Virginia, and the York River from West Point, Virginia, to the mouth of the York River (Tue Marsh Light) including all tributaries to their headwaters that enter the estuarine portions of the Mattaponi River, the Pamunkey River and the York River;~~(Repealed.)
18. ~~Tidal freshwater James River from the fall line to the confluence of the Chickahominy River (Buoy 70) including all tributaries to a distance five river miles above their fall lines that enter the tidal freshwater James River;~~(Repealed.)
19. ~~Estuarine portion of the James River from its confluence with the Chickahominy River (Buoy 70) to the mouth of the James River (Buoy 25), including all tributaries to their headwaters;~~(Repealed.)
20. ~~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, those tributaries listed above, and the Mattaponi River upstream of Clifton, Virginia, and the Pamunkey River upstream of Sweet Hall Landing, Virginia; and~~(Repealed.)
21. Tidal freshwater Blackwater River from the Norfolk and Western railway bridge at Burdette, Virginia, and tidal freshwater Nottoway River from the Norfolk and Western railway bridge at Courtland, Virginia, to the state line, including all tributaries to their headwaters that enter the tidal freshwater portions of the Blackwater River and the Nottoway River.
22. Stony Creek from its confluence with the North Fork Shenandoah River to its headwaters including all named and

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\* When the word "tributaries" is used in this standard, it does not refer to the mainstem of the water body that has been named.

unnamed tributaries to their headwaters.

B. Whenever any water body is designated as "nutrient enriched waters," the board shall modify the VPDES permits of point source dischargers into the "nutrient enriched waters" as provided in the board's Policy for Nutrient Enriched Waters (9 VAC 25-40-10 et seq.).

Certified True and Accurate: \_\_\_\_\_  
Robert G. Burnley, Director, DEQ

Date: \_\_\_\_\_