

**Chlorophyll a – Draft Proposed Revisions
Attachment IV**

Current Rule:

15A NCAC 02B .0211 FRESH SURFACE WATER QUALITY STANDARDS FOR CLASS C WATERS

- (3) Quality standards applicable to all fresh surface waters:
- (a) Chlorophyll a (corrected): not greater than 40 ug/l for lakes, reservoirs, and other waters subject to growths of macroscopic or microscopic vegetation not designated as trout waters, and not greater than 15 ug/l for lakes, reservoirs, and other waters subject to growths of macroscopic or microscopic vegetation designated as trout waters (not applicable to lakes or reservoirs less than 10 acres in surface area). The Commission or its designee may prohibit or limit any discharge of waste into surface waters if, in the opinion of the Director, the surface waters experience or the discharge would result in growths of microscopic or macroscopic vegetation such that the standards established pursuant to this Rule would be violated or the intended best usage of the waters would be impaired

Proposed Chlorophyll a Standard Modernization:

15A NCAC 02B .0211 Fresh Surface Water Quality Standards For Class C Waters

- (3) Quality standards applicable to all fresh surface waters:
- (a) Chlorophyll a (corrected):
 - (i) Environmental Management Commission classified trout waters: not to exceed a mean of 15 ug/L;
 - (ii) Mountain and upper Piedmont waters, defined by 15A NCAC 02B .0202: not to exceed a mean of 25 ug/L;
 - (iii) All other fresh surface waters: not to exceed a mean of 40 ug/L;

Chlorophyll a criteria are applicable to any portion of lakes, reservoirs and other waters subject to growths of macroscopic or microscopic vegetation (lakes or reservoirs less than 10 acres in surface area are excluded). The Commission or its designee may prohibit or limit any discharge of waste into surface waters if the surface waters experience or the discharge would result in growths of microscopic or macroscopic vegetation such that the standards established pursuant to this Rule would be violated or the intended best usage of the waters would be impaired.

Current Rule:

15A NCAC 02B .0220 TIDAL SALT WATER QUALITY STANDARDS FOR CLASS SC WATERS

(3) Quality standards applicable to all tidal salt waters:

(a) Chlorophyll a (corrected): not greater than 40 ug/l in sounds, estuaries, and other waters subject to growths of macroscopic or microscopic vegetation. The Commission or its designee may prohibit or limit any discharge of waste into surface waters if, in the opinion of the Director, the surface waters experience or the discharge would result in growths of microscopic or macroscopic vegetation such that the standards established pursuant to this Rule would be violated or the intended best usage of the waters would be impaired

Proposed Tidal Salt Water Chlorophyll a Standard Modernization:

15A NCAC 02B .0220 Tidal Salt Water Quality Standards For Class SC Waters

(3) Quality standards applicable to all tidal salt waters:

(a) Chlorophyll a (corrected): Not to exceed a mean of 40 ug/L in any portion of sounds, estuaries and other waters subject to growths of macroscopic or microscopic vegetation. The Commission or its designee may prohibit or limit any discharge of waste into surface waters if the surface waters experience or the discharge would result in growths of microscopic or macroscopic vegetation such that the standards established pursuant to this Rule would be violated or the intended best usage of the waters would be impaired.

Current Rule:

15A NCAC 02B .0203 PROTECTION OF WATERS DOWNSTREAM OF RECEIVING WATERS

Water quality based effluent limitations or management practices for direct or indirect discharges of waste or for other sources of water pollution will be developed by the Division such that the water quality standards and best usage of receiving waters and all downstream waters will not be impaired.

Proposed Chlorophyll a Thresholds for Fresh and Saltwaters:

15A NCAC 2B .0203 Protection of Waters Downstream Of Receiving Waters

Water quality based effluent limitations or management practices for direct or indirect discharges of waste or for other sources of water pollution will be developed by the Division such that the water quality standards and best usage of receiving waters and all downstream waters will not be impaired.

- (1) Freshwater chlorophyll a threshold levels: The following chlorophyll a threshold levels shall be applicable to any portion of lakes, reservoirs and other waters subject to growths of macroscopic or microscopic vegetation (lakes or reservoirs less than 10 acres in surface area are excluded). An exceedance of the threshold will indicate the potential for nutrient enrichment thereby triggering the implementation of management strategies intended to prevent the waters from reaching and subsequently exceeding the water quality standards. These management strategies may include technology based effluent limits. The chlorophyll a thresholds are not water quality standards and shall not be used to signify use impairment.
 - (a) Environmental Management Commission classified trout waters: a mean of 10 ug/L;
 - (b) Mountain and upper piedmont waters, defined by 15A NCAC 02B .0202: a mean of 15 ug/L;
 - (c) All other fresh surface waters: a mean of 25 ug/L
- (2) Saltwater chlorophyll a threshold level: The following chlorophyll a threshold level shall be applicable to any portion of sounds, estuaries and other waters subject to growths of macroscopic or microscopic vegetation. An exceedance of the threshold will indicate the potential for nutrient enrichment thereby triggering the implementation of management strategies intended to prevent the waters from reaching and subsequently exceeding the water quality standards. These management strategies may include technology based effluent limits. The chlorophyll a thresholds are not water quality standards and shall not be used to signify use impairment.
 - (a) Tidal salt waters: a mean of 20 ug/L.