

**15A NCAC 02B .0218 FRESH SURFACE WATER QUALITY STANDARDS FOR CLASS WS-V WATERS**

The following water quality standards shall apply to surface waters within water supply watersheds classified as WS-V. Water quality standards applicable to Class C waters as described in Rule .0211 of this Section shall also apply to Class WS-V waters.

- (1) The best usage of waters classified as WS-V shall be as waters that are protected as water supplies which are generally upstream and draining to Class WS-IV waters; waters previously used for drinking water supply purposes; or waters used by industry to supply their employees, but not municipalities or counties, with a raw drinking water supply source, although this type of use is not restricted to WS-V classification; and all Class C uses.
- (2) The best usage of waters classified as WS-V shall be maintained as follows:
  - (a) Water quality standards in a WS-V water shall meet the requirements as specified in Item (3) of this Rule.
  - (b) Wastewater and stormwater point source discharges in a WS-V water shall meet the requirements as specified in Item (4) of this Rule.
  - (c) Nonpoint source pollution in a WS-V water shall meet the requirements as specified in Item (5) of this Rule.
  - (d) Following approved treatment, as defined in Rule .0202 of this Section, the waters shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, or food-processing purposes that are specified in 40 CFR Part 141 National Primary Drinking Water Regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C .1500.
  - (e) The Commission or its designee may apply management requirements for the protection of waters downstream of receiving waters provided in Rule .0203 of this Section.
  - (f) The Commission shall consider a more protective classification for the water supply if a resolution requesting a more protective classification is submitted from all local governments having land use jurisdiction within the affected watershed.
  - (g) Sources of water pollution that preclude any of the best uses on either a short-term or long-term basis shall be deemed to violate a water quality standard;
- (3) Water quality standards applicable to Class WS-V Waters shall be as follows:
  - (a) MBAS (Methylene-Blue Active Substances): not greater than 0.5 mg/l to protect the aesthetic qualities of water supplies and to prevent foaming;
  - (b) Odor producing substances contained in sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances or waste, as will not cause organoleptic effects in water supplies that can not be corrected by treatment, impair the palatability of fish, or have an adverse impact, as defined in 15A NCAC 02H .1002, on any best usage established for waters of this class;
  - (c) Chlorinated phenolic compounds: not greater than 1.0 ug/l to protect water supplies from taste and odor problems due to chlorinated phenols. Specific phenolic compounds may be given a different limit if it is demonstrated not to cause taste and odor problems and not to be detrimental to other best usage;
  - (d) Total hardness: not greater than 100 mg/l as calcium carbonate (CaCO<sub>3</sub> or Ca + Mg);
  - (e) Solids, total dissolved: not greater than 500 mg/l;
  - (f) Toxic and other deleterious substances that are non-carcinogens:
    - (i) Barium: 1.0 mg/l;
    - (ii) Chloride: 250 mg/l;
    - (iii) Nickel: 25 ug/l;
    - (iv) Nitrate nitrogen: 10.0 mg/l;
    - (v) 2,4-D: 70 ug/l;
    - (vi) 2,4,5-TP (Silvex): 10 ug/l; and
    - (vii) Sulfates: 250 mg/l;
  - (g) Toxic and other deleterious substances that are carcinogens:
    - (i) Aldrin: 0.05 ng/l;
    - (ii) Arsenic: 10 ug/l;
    - (iii) Benzene: 1.19 ug/l;
    - (iv) Carbon tetrachloride: 0.254 ug/l;

- (v) Chlordane: 0.8 ng/l;
  - (vi) Chlorinated benzenes: 488 ug/l;
  - (vii) DDT: 0.2 ng/l;
  - (viii) Dieldrin: 0.05 ng/l;
  - (ix) Dioxin: 0.000005 ng/l;
  - (x) Heptachlor: 0.08 ng/l;
  - (xi) Hexachlorobutadiene: 0.44 ug/l;
  - (xii) Polynuclear aromatic hydrocarbons (total of all PAHs): 2.8 ng/l;
  - (xiii) Tetrachloroethane (1,1,2,2): 0.17 ug/l;
  - (xiv) Tetrachloroethylene: 0.7 ug/l;
  - (xv) Trichloroethylene: 2.5 ug/l; and
  - (xvi) Vinyl Chloride: 0.025 ug/l.
- (4) No discharge of sewage, industrial wastes, or other wastes shall be allowed that have an adverse effect on human health or that are not treated in accordance with the permit or other requirements established by the Division pursuant to G.S. 143-215.1. Upon request by the Commission, dischargers or industrial users subject to pretreatment standards shall disclose all chemical constituents present or potentially present in their wastes and chemicals that could be spilled or be present in runoff from their facility which may have an adverse impact on downstream water quality. These facilities may be required to have spill and treatment failure control plans as well as perform special monitoring for toxic substances.
- (5) Nonpoint Source pollution in a WS-V water shall not have an adverse impact on waters for use as water supply or any other designated use.

*History Note: Authority G.S. 143-214.1; 143-215.3(a)(1);  
Eff. October 1, 1989;  
Amended Eff. January 1, 2015; May 1, 2007; April 1, 2003; October 1, 1995;  
Readopted Eff. November 1, 2019.*