

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

The following water quality standards 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 WS-V waters shall be as follows: waters that are protected as water supplies that are upstream and draining to Class WS-IV waters; or 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 shall not be restricted to WS-V classification; and all Class C uses. The Commission may 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;
- (2) The conditions related to the best usage shall be as follows: waters of this class are protected water supplies; the waters, following treatment required by the Division, shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, or food-processing purposes that are specified in the national drinking water regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C .1500; no categorical restrictions on watershed development or wastewater discharges shall be required, however, the Commission or its designee may apply management requirements for the protection of waters downstream of receiving waters (15A NCAC 02B .0203). Sources of water pollution that preclude any of these uses on either a short-term or long-term basis shall be considered to be violating a water quality standard;
- (3) Quality standards applicable to Class WS-V Waters shall be as follows:
  - (a) Sewage, industrial wastes, non-process industrial wastes, or other wastes: none shall be allowed that have an adverse effect on human health or that are not treated to the satisfaction of the Commission and in accordance with the requirements of the Division. Any discharges or industrial users subject to pretreatment standards shall be required by the Commission to 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 supplies. These facilities may be required to have spill and treatment failure control plans as well as perform special monitoring for toxic substances;
  - (b) MBAS (Methylene-Blue Active Substances): not greater than 0.5 mg/l to protect the aesthetic qualities of water supplies and to prevent foaming;
  - (c) Nonpoint Source and Stormwater Pollution: none that would adversely impact the waters for use as water supply or any other designated use;
  - (d) 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 taste and odor difficulties in water supplies that cannot be corrected by treatment, impair the palatability of fish, or have a deleterious effect upon any best usage established for waters of this class;
  - (e) 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;
  - (f) Total hardness: not greater than 100 mg/l as calcium carbonate (CaCO<sub>3</sub> or Ca + Mg);
  - (g) Total dissolved solids: not greater than 500 mg/l;
  - (h) Toxic and other deleterious substances:
    - (i) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for non-carcinogens in Class WS-V waters:
      - (A) Barium: 1.0 mg/l;
      - (B) Chloride: 250 mg/l;
      - (C) Nickel: 25 ug/l;
      - (D) Nitrate nitrogen: 10.0 mg/l;

- (E) 2,4-D: 70 ug/l;
  - (F) 2,4,5-TP (Silvex): 10 ug/l; and
  - (G) Sulfates: 250 mg/l.
- (ii) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for carcinogens in Class WS-V waters:
- (A) Aldrin: 0.05 ng/l;
  - (B) Arsenic: 10 ug/l;
  - (C) Benzene: 1.19 ug/l;
  - (D) Carbon tetrachloride: 0.254 ug/l;
  - (E) Chlordane: 0.8 ng/l;
  - (F) Chlorinated benzenes: 488 ug/l;
  - (G) DDT: 0.2 ng/l;
  - (H) Dieldrin: 0.05 ng/l;
  - (I) Dioxin: 0.000005 ng/l;
  - (J) Heptachlor: 0.08 ng/l;
  - (K) Hexachlorobutadiene: 0.44 ug/l;
  - (L) Polynuclear aromatic hydrocarbons (total of all PAHs): 2.8 ng/l;
  - (M) Tetrachloroethane (1,1,2,2): 0.17 ug/l;
  - (N) Tetrachloroethylene: 0.7 ug/l;
  - (O) Trichloroethylene: 2.5 ug/l; and
  - (P) Vinyl Chloride: 0.025 ug/l.

*History Note:* Authority G.S. 143-214.1; 143-215.3(a)(1);  
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