

15A NCAC 02B .0212 FRESH SURFACE WATER QUALITY STANDARDS FOR CLASS WS-I WATERS

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

- (1) The best usage of waters classified as WS-I shall be as a source of water supply for drinking, culinary, or food processing purposes for those users desiring maximum protection of their water supplies in the form of the most stringent WS classification, and any best usage specified for Class C waters. Class WS-I waters are waters located on land in public ownership and waters located in undeveloped watersheds.
- (2) The best usage of waters classified as WS-I shall be maintained as follows:
 - (a) Water quality standards in a WS-I watershed shall meet the requirements as specified in Item (3) of this Rule.
 - (b) Wastewater and stormwater point source discharges in a WS-I watershed shall meet the requirements as specified in Item (4) of this Rule.
 - (c) Nonpoint source pollution in a WS-I watershed 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, and 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, incorporated by reference including subsequent amendments and editions.
 - (e) 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.
 - (f) The Class WS-I classification may be used to protect portions of Class WS-II, WS-III, and WS-IV water supplies. For reclassifications occurring after the July 1, 1992 statewide reclassification, a WS-I classification that is requested by local governments shall be considered by the Commission if all local governments having jurisdiction in the affected areas have adopted a resolution and the appropriate ordinances as required by G.S. 143-214.5(d) to protect the watershed or if the Commission acts to protect a watershed when one or more local governments has failed to adopt protective measures as required by this Sub-Item.
- (3) Water quality standards applicable to Class WS-I 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) Total coliforms shall not exceed 50/100 ml (MF count) as a monthly geometric mean value in watersheds serving as unfiltered water supplies;
 - (c) Chlorinated phenolic compounds: not greater than 1.0 ug/l to protect water supplies from taste and odor problems from chlorinated phenols;
 - (d) Solids, total dissolved: not greater than exceed 500 mg/l;
 - (e) Total hardness: not greater than 100 mg/l as calcium carbonate (CaCO₃ or Ca + Mg);
 - (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) Wastewater and stormwater point source discharges in a WS-I watershed shall be permitted pursuant to 15A NCAC 02B .0104.
- (5) Nonpoint source pollution in a WS-I watershed shall not have an adverse impact, as defined in 15A NCAC 02H .1002, on use as a water supply or any other designated use.

*History Note: Authority G.S. 143-214.1; 143-215.3(a)(1);
Eff. February 1, 1976;
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March 1, 1991; October 1, 1989;
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