SECTION .2200 - GROUND WATER SYSTEMS

15 A NCAC 18C .2201 APPLICABILITY AND RESIDUAL DISINFECTANT CONCENTRATIONS

(a) Applicability. The provisions of this Section apply to all ground water systems. A ground water system is defined as any public water system that uses ground water including a consecutive system receiving finished ground water. A ground water system does not include public water systems that combine all of their ground water with surface water or with ground water under the direct influence of surface water prior to treatment under Subpart H.

(b) Disinfection. Systems providing chemical disinfection in accordance with 15A NCAC 18C .0402(j) shall measure residual disinfectant concentrations. The locations and concentrations shall be as follows:

(1) Water entering the distribution system. The residual disinfectant concentration shall not be less than 0.2 mg/1 measured as free chlorine when chlorine is the singular applied disinfectant and shall not be less than 1.0 mg/l measured as total chlorine when ammonia and chlorine are applied disinfectants for more than two consecutive daily visits for systems that are collecting grab samples and not more than four hours for systems that perform continuous monitoring.

(2) Water in the distribution system at Coliform Sampling Sites. The residual disinfectant concentration shall not be less than 0.2 mg/1 measured as free chlorine when chlorine is the singular applied disinfectant and shall not be less than 1.0 mg/l measured as total chlorine when ammonia and chlorine are applied disinfectants.

(3) Water in the distribution system at Maximum Residence Time Sites. Systems shall measure residual disinfectant concentrations at maximum residence time sites or at other locations with high water age. The residual disinfectant concentrations at these locations shall be at detectable levels as set forth and calculated in 40 C.F.R. 141.72(a)(4) and (b)(3).

History Note: *Authority G.S. 130A-315; P.L. 93-523;*
Eff. October 1, 2009;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November 23, 2015.

15A NCAC 18C .2202 GROUND WATER RULE

The provisions of 40 C.F.R. 141, Subpart S – Ground Water Rule are hereby incorporated by reference including any subsequent amendments and editions. Copies are available for public inspection as set forth in Rule .0102 of this Subchapter. The provisions are incorporated with the following exceptions:

(1) Fecal indicator for source water monitoring. When systems are required to conduct triggered source water monitoring or assessment source water monitoring under 40 C.F.R. 141.402 (a) and (b) respectively, any of the following three fecal indicators can be used: E. coli, enterococci, or coliphage.

(2) Corrective Action Alternatives. Ground water systems that are required to implement corrective action in accordance with 40 C.F.R. 141.403(a)(6) must determine that alternatives (a)(6)(i), (a)(6)(ii), and (a)(6)(iii) are not feasible before implementing alternative (a)(6)(iv). The rationale for selection of alternative (a)(6)(iv) must be documented in accordance with Rule .0307(b)(10) of this Subchapter.

(3) Assessment Source Water Monitoring. The Department shall use information from the Public Water Supply Section's database and from its Source Water Assessment Program to identify sources subject to assessment source water monitoring. Systems notified by the Department must commence assessment source water monitoring for the sources identified. The system shall conduct assessment source water monitoring for any source that receives physical or chemical treatment and possesses any one of the following characteristics:

(a) Any source subject to the requirements of G.S. 130A-317(b) and rules in this Subchapter for which the public water system did not receive approval from the Department for construction or alteration.

(b) Source is deemed by the Source Water Assessment Program to have a Higher Inherent Vulnerability Rating and the system has historical total or fecal coliform MCL violations during the compliance periods between January 1, 2005 and December 31, 2008.

(c) Source is deemed by the Source Water Assessment Program to have a Higher Inherent Vulnerability Rating and the system has total or fecal coliform monitoring violations

cited for more than 25 percent of the compliance periods between January 1, 2005 and December 31, 2008.

(4) Any system shall perform assessment source water monitoring as directed by the Department in response to deficiencies identified by a sanitary survey that are related to source or treatment. Assessment source water monitoring shall be conducted in accordance with the requirements specified in 40 C.F.R. 141.402(b)(1) through (6) using any of the following three fecal indicators: E. coli, enterococci, or coliphage.

History Note: *Authority G.S. 130A-315; 130A-317; P.L. 93-523; 40 C.F.R. 141 Subpart S;*
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