

1 15A NCAC 18C .0102 is amended pursuant to G.S. 150B-21.5(a)(2), (4), and (5) as follows:

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3 **15A NCAC 18C .0102 DEFINITIONS**

4 (a) The definitions contained in G.S. 130A-2, G.S. 130A-290, and G.S. 130A-313 are hereby incorporated by  
5 reference including any subsequent amendments and editions. ~~Copies of this material are available for inspection~~  
6 ~~and may be obtained from the Department of Environment, Health, and Natural Resources, Division of~~  
7 ~~Environmental Health, Public Water Supply Section, P.O. Box 29536, Raleigh, North Carolina 27626-0536 at no~~  
8 ~~charge. Copies are available for public inspection at the principal address of the Division of Water Resources at 512~~  
9 ~~North Salisbury Street, Raleigh NC 27604-1170; 1634 Mail Service Center, Raleigh NC 27699-1634; or at the~~  
10 ~~website of the Division at [www.ncwater.org](http://www.ncwater.org).~~

11 (b) The definitions contained in 40 C.F.R. 141.2 are hereby incorporated by reference including any subsequent  
12 amendments and editions except the following definitions are not adopted:

- 13 (1) ~~"Disinfection", "Disinfection;"~~  
14 (2) ~~"Maximum containment level", level;"~~  
15 (3) ~~"Person", "Person;"~~  
16 (4) ~~"Public Water System", System;"~~ and  
17 (5) ~~"Supplier of water"- water."~~

18 ~~This material is available for inspection at the Department of Environment, Health, and Natural Resources, Division~~  
19 ~~of Environmental Health, 1330 Saint Mary's Street, Raleigh, North Carolina. Non members may obtain copies from~~  
20 ~~the American Water Works Association, Information Services, 6666 West Quincy Avenue, Denver, Colorado 80235~~  
21 ~~at a cost of fifteen dollars (\$15.00) up to 20 pages and thirty cents (\$0.30) per page for each additional page. Copies~~  
22 ~~are available for public inspection as set forth in Rule 18C .0102 of this Section. In addition, copies of governing~~  
23 ~~federal regulations may be obtained from the Environmental Protection Agency's (USEPA) homepage at~~  
24 ~~<http://water.epa.gov/lawsregs/rulesregs/sdwa/index.cfm> or from the USEPA's Drinking Water Hotline at 1-800-426-~~  
25 ~~4791.~~

26 (c) In addition to the definitions incorporated by ~~reference,~~ reference as set forth in Paragraph (a), the following  
27 definitions shall apply to this Subchapter:

- 28 (1) "Act" means the North Carolina Drinking Water Act.  
29 (2) "Class I reservoir" means a reservoir from which water flows by gravity or is pumped directly to a  
30 treatment plant or to a small intervening storage basin and thence to a treatment plant.  
31 (3) "Class II reservoir" means a reservoir from which the water flows by gravity or is pumped to a  
32 Class I reservoir prior to final entrance to a water treatment plant.  
33 (4) "Class III reservoir" ~~is~~ means an impoundment used for electric power generation, flood control,  
34 and similar purposes, and ~~which also that~~ which also serves as a source of raw water for a community water  
35 system.  
36 (5) "Cross-connection" means:

- 1 (A) any physical connection between a potable water supply system and any other piping  
2 system, sewer fixture, container, or device, whereby water or other liquids, mixtures, or  
3 substances may flow into or enter the potable water supply system;
- 4 (B) any potable water supply outlet which is submerged or is designed or intended to be  
5 submerged in non-potable water or in any source of contamination ~~or~~; or
- 6 (C) an air gap, providing a space between the potable water pipe outlet and the flood level  
7 rim of a receiving vessel of less than twice the diameter of the potable water pipe.
- 8 (6) "Community Water System intake" means the structure at the head of a conduit into which water  
9 is diverted from a stream or reservoir for transmission to water treatment facilities.
- 10 (7) "Disinfection" means a process ~~which~~ that inactivates pathogenic organisms in water.
- 11 (8) "Fecal Coliform" means bacteria ~~consistently~~ found in the intestine of ~~man~~ humans and other  
12 warm blooded animals ~~which~~ that are not normally disease producing but serve as indicators of  
13 recent fecal contamination. They are members of the Family Enterobacteriaceae, Genus  
14 Escherichia, Species Coli.
- 15 (9) "Mobile Home Park" means a site or tract of land where spaces are provided for lease or rental  
16 only to mobile home occupants.
- 17 (10) "Mobile home subdivision" means a subdivided site or tract of land in which lots are sold for use  
18 by mobile home occupants.
- 19 (11) "Non-potable water supply" means waters not approved for drinking or other household uses.
- 20 (12) "Potable water supply" means water ~~which~~ is approved for drinking or other household uses.
- 21 (13) "Raw water" means surface water or groundwater ~~which~~ that because of bacteriological quality,  
22 chemical quality, turbidity, color, or mineral content makes it unsatisfactory as a source for a  
23 community water system without treatment.
- 24 (14) "Raw water reservoir" means a natural or artificial impoundment used for the primary purpose of  
25 storing raw water to be subsequently treated for use as a source for a community water system.
- 26 (15) "Service connection" means a piped connection from a water main for the purpose of conveying  
27 water to a building or onto a premise for human use.
- 28 (16) "Water supply product" means any chemical or substance added to a public water system in  
29 conjunction with a treatment technique or material used in construction of a public water system.  
30 The term includes any material used in the manufacture of public water system components,  
31 appurtenances, any pipe, storage tank or valve ~~which~~ that comes in contact with water intended for  
32 use in a public water system.

33

34 *History Note:* Authority G.S. 130A-311 through 130A-327; P.L. 93-523; 40 C.F.R. 141.2;  
35 Eff. January 1, 1977;  
36 Readopted Eff. December 5, 1977;  
37 Amended Eff. April 1, 2014; July 1, 1994; August 1, 1991; January 1, 1991; September 1, 1990.

1 15A NCAC 18C .0201 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

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3 **15A NCAC 18C .0201 SURFACE SUPPLIES FOR PUBLIC WATER SYSTEMS**

4 (a) A surface supply may be used for a community or a non-transient, non-community water system with  
5 disinfection and without filtration if it complies with the provisions of this Section and Rule .2005 of this  
6 Subchapter.

7 (b) Such water supply shall be derived from uninhabited wooded areas.

8 (c) The entire watershed shall be either owned or controlled by the person supplying the water or be under the  
9 control of the federal or state government; however, no such new water supply shall be created except where the  
10 water system owner shall own in its entirety the watershed from which the water will be obtained.

11 (d) The water after disinfection shall be of potable quality as determined by bacteriological and chemical tests  
12 performed by a certified laboratory. The presence of contaminants shall not exceed the limits set forth in Section  
13 .1500 of this Subchapter.

14 (e) The water source shall have ~~an WS-I~~ a WS-I classification as established by the Environmental Management  
15 Commission and shall meet the quality standards for that classification, codified in 15A NCAC ~~2B~~ ~~which are~~  
16 ~~hereby incorporated by reference including any subsequent amendments and editions. Copies of this material are~~  
17 ~~available for inspection and may be obtained from the Department of Environment, Health, and Natural Resources,~~  
18 ~~Division of Environmental Health, Public Water Supply Section, P.O. Box 29536, Raleigh, North Carolina 27626-~~  
19 ~~0536 at no charge.~~ 2B. Copies are available for public inspection as set forth in Rule 18C .0102 of this Subchapter.

20  
21 *History Note: Authority G.S. 130A-315; 130A-318; P.L. 93-523;*

22 *Eff. January 1, 1977;*

23 *Readopted Eff. December 5, 1977;*

24 *Amended Eff. April 1, 2014; July 1, 1994; February 1, 1987; September 1, 1979.*

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1 15A NCAC 18C .0202 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

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3 **15A NCAC 18C .0202 REMOVAL OF DISSOLVED MATTER AND SUSPENDED MATTER**

4 Any surface water ~~which~~ that is to receive treatment for removal of dissolved matter or suspended matter in order to  
5 be used for a public water system shall be obtained from a source ~~which~~ that meets the WS-I, WS-II, WS-III, WS-IV  
6 or WS-V stream classification standards established by the Environmental Management Commission codified in  
7 15A NCAC ~~2B~~ ~~which are hereby incorporated by reference including any subsequent amendments and editions.~~  
8 ~~Copies of this material are available for inspection and may be obtained from the Department of Environment,~~  
9 ~~Health, and Natural Resources, Division of Environmental Health, Public Water Supply Section, P.O. Box 29536,~~  
10 ~~Raleigh, North Carolina 27626-0536 at no charge.~~ 2B. Copies are available for public inspection as set forth in Rule  
11 18C .0102 of this Subchapter. The source shall be protected from potential sources of pollution as determined by a  
12 sanitary survey of the watershed made by an authorized representative of the Department. The source supply shall  
13 be sufficient in capacity to satisfy the anticipated needs of the users for the period of design.

14

15 *History Note: Authority G.S. 130A-315; 130A-318; P.L. 93-523;*

16 *Eff. January 1, 1977;*

17 *Readopted Eff. December 5, 1977;*

18 *Amended Eff. April 1, 2014; July 1, 1994; September 1, 1990; February 1, 1987; September 1,*  
19 *1979.*

20

1 15A NCAC 18C .0302 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

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3 **15A NCAC 18C .0302 SUBMITTALS**

4 (a) All plans, specifications, ~~reports~~ reports, or other data shall be submitted in triplicate for review by the Public  
5 Water Supply Section, Division of ~~Environmental Health, P.O. Box 29536, Raleigh, North Carolina~~  
6 ~~27626-0536~~, Water Resources at 512 N Salisbury Street, Room 1304A, Raleigh NC 27604-1170, or 1634 Mail  
7 Service Center, Raleigh NC 27699-1634.

8 (b) Engineering plans shall consist of legible prints having black, blue, or brown lines on a white background  
9 suitable for microfilming. The engineering plans shall not be more than 36 inches wide and 48 inches long and not  
10 be less than 11 inches wide and 17 inches long.

11 (c) An applicant subject to G.S. 143-355(l) shall submit three copies of the adopted Local Water Supply Plan. If  
12 information required in the Engineer's Report or the Water System Management Plan is included in an adopted  
13 Local Water Supply Plan, a submittal to the Department may incorporate this information by referencing the  
14 location in the adopted Local Water Supply Plan.

15 (d) Existing systems that have previously submitted an Engineer's Report and a Water System Management Plan in  
16 accordance with Rule .0307 of this Section shall document any changes either as revised reports and plans or  
17 addendums.

18

19 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*

20 *Eff. January 1, 1977;*

21 *Readopted Eff. December 5, 1977;*

22 *Amended Eff. July 1, 1994; December 1, 1991; September 1, 1990; June 30, 1980; September 1,*  
23 *1979;*

24 *Temporary Amendment Eff. October 1, 1999;*

25 *Amended Eff. April 1, 2014; August 1, 2000.*

1 15A NCAC 18C .0401 is amended pursuant to G.S. 150B-21.5(a)(2) as follows:

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3 **15A NCAC 18C .0401 MINIMUM REQUIREMENTS**

4 The design criteria given in this Section are the minimum requirements for approval of plans and specifications by  
5 the ~~Division of Environmental Health, Department of Environment, Health, and Natural Resources.~~ Department.

6 The Department provides supplemental criteria for design of water systems in ~~15A NCAC 18C .0500-.1000.~~ Rules  
7 .0500-.1000 of this Subchapter.

8

9 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*

10 *Eff. January 1, 1977;*

11 *Readopted Eff. December 5, ~~1977.~~1977;*

12 *Amended Eff. April 1, 2014; July 1, 1994; September 1, 1979.*

1 15A NCAC 18C .0402 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2  
3 **15A NCAC 18C .0402 WATER SUPPLY WELLS**

4 (a) Well Construction. The construction of water supply wells shall conform to well construction regulations and  
5 standards of the Division of ~~Environmental Management, N.C. Water Resources~~, Department of ~~Environment,~~  
6 ~~Health, Environment~~ and Natural Resources, codified in 15A NCAC ~~2C~~ which are hereby incorporated by reference  
7 ~~including any subsequent amendments and editions. Copies of this material are available for inspection and may be~~  
8 ~~obtained from the Department of Environment, Health, and Natural Resources, Division of Environmental Health,~~  
9 ~~Public Water Supply Section, P.O. Box 29536, Raleigh, North Carolina 27626 0536 at no charge. 2C. Copies are~~  
10 available for public inspection as set forth in Rule 18C .0102 of this Subchapter.

11 (b) Upper Terminal of Well. The well casing shall neither terminate below ground nor in a pit. The pump pedestal  
12 for above ground pumps of every water supply well shall project not less than six inches above the concrete floor of  
13 the well house, or the concrete slab surrounding the well. The well casing shall project at least one inch above the  
14 pump pedestal. For submersible pumps the casing shall project at least six inches above the concrete floor or slab  
15 surrounding the well head.

16 (c) Sanitary Seal. The upper terminal of the well casing shall be sealed watertight with the exception of a vent pipe  
17 or vent tube having a downward-directed, screened opening.

18 (d) Concrete Slab or Well House Floor. Every water supply well shall have a continuous bond concrete slab or well  
19 house concrete floor extending at least three feet horizontally around the outside of the well casing. Minimum  
20 thickness for the concrete slab or floor shall be four inches.

21 (e) Sample Tap and Waste Discharge Pipe. Faucets or spigots shall be provided for sampling both raw water prior  
22 to treatment and treated water prior to delivery to the first customer. Sample spigots shall not be threaded for hose  
23 connection. Threaded hose bibs shall be equipped with anti-siphon devices. A water sample tap and piping  
24 arrangement for discharge of water to waste shall be provided.

25 (f) Physical Security and Well Protection. A water supply well shall be secured against unauthorized access and  
26 protected from the weather. One of the following structures shall be provided:

27 (1) Well house. A well house shall be constructed as follows:

28 (A) ~~Structures~~ structures shall comply with applicable provisions of state and local building  
29 codes;

30 (B) ~~Drainage~~ drainage shall be provided by floor drain, wall drain, or slope to door;

31 (C) ~~Access~~ access into the structure shall be a doorway with minimum dimensions of 36  
32 inches wide and 80 inches high; ~~and~~

33 (D) ~~The the~~ structure shall have adequate space for the use and maintenance of the piping and  
34 appurtenances. If treatment is provided at the well, the provisions of Rule .0404(a) of  
35 this Section shall ~~apply.~~ apply; and

36 (E) ~~The the~~ structure shall be secured with lock and key.

37 (2) Prefabricated structures. A prefabricated structure shall be constructed as follows:

- 1 (A) ~~A well head~~ a well-head cover shall be hinged and constructed so that it can be lifted by  
2 one person;
- 3 (B) ~~A locking~~ a locking mechanism shall be provided; and
- 4 (C) ~~Permanent~~ permanent fastening to the slab (such as with bolts) shall not be permitted.
- 5 (3) Fencing and temperature protection. Fencing and temperature protection shall be constructed as  
6 follows:
- 7 (A) ~~The~~ the fence height shall be a minimum of six feet;
- 8 (B) ~~The~~ the fence shall be constructed of chain link with locked access;
- 9 (C) ~~The~~ the fence shall enclose the ~~well;~~ well, hydropneumatic tank, and associated  
10 equipment;
- 11 (D) ~~Access~~ access shall be provided for maintenance and operation; and
- 12 (E) ~~The~~ the well, piping, treatment equipment, and electrical controls shall be protected  
13 against freezing. Wrapping with insulation is acceptable for appurtenances such as the  
14 air vent, meter, valves, and sample taps provided they are visible and accessible.  
15 Insulation shall be jacketed.

16 (g) Yield:

- 17 (1) Wells shall be tested for yield and drawdown. A report or log of at least a 24-hour drawdown test  
18 to determine yield shall be submitted to the Division of ~~Environmental Health~~ Water Resources  
19 for each well.
- 20 (2) Wells shall be located so that the drawdown of any well ~~will~~ shall not interfere with the required  
21 yield of another well.
- 22 (3) The combined yield of all wells of a water system shall provide in 12 hours pumping time the  
23 average daily demand as determined in Rule .0409 of this Section.
- 24 (4) The capacity of the permanent pump to be installed in each well shall not exceed the yield of the  
25 well as determined by the drawdown test.
- 26 (5) A residential community water system using well water as its source of supply and designed to  
27 serve 50 or more connections shall provide at least two wells. A travel trailer park or campground  
28 designed to serve 100 or more connections shall provide at least two wells. In lieu of a second  
29 well, another approved water supply source may be accepted.
- 30 (6) A totalizing meter shall be installed in the piping system from each well.

31 (h) Initial Disinfection of Water Supply Well. All new wells, and wells that have been repaired or reconditioned  
32 shall be cleaned of foreign substances such as soil, grease, and oil, and then shall be disinfected. A representative  
33 sample or samples of the water (free of chlorine) shall be collected and submitted to a certified laboratory for  
34 bacteriological analyses. ~~After disinfection the~~ The water supply shall not be placed into service after disinfection  
35 until bacteriological test results of representative water samples analyzed in a certified laboratory are found to be  
36 free of bacteriological contamination.



1 (i) Initial Chemical Analyses. A representative sample of water from every new water supply well shall be  
2 collected and submitted for chemical analyses to the Division of Laboratory Services or to a certified laboratory.  
3 The results of the analysis shall demonstrate the water is treatable to meet water quality standards in Section .1500  
4 of this Subchapter and needed treatment shall be provided before the well is placed into service.

5 (j) Continuous Disinfection. Continuous application of ~~chlorine or chlorine~~ hypochlorite ~~solution~~ solution, or some  
6 other approved and equally efficient disinfectant shall be provided for all well water supplies introduced on or after  
7 January 1, 1972. Equipment for determining residual chlorine concentration in the water shall be included in the  
8 plans and specifications.

9

10 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*

11 *Eff. January 1, 1977;*

12 *Readopted Eff. December 5, 1977;*

13 *Amended Eff. April 1, 2014; July 1, 1994; September 1, 1990; January 1, 1986; March 31, 1980.*

1 15A NCAC 18C .0405 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2  
3 **15A NCAC 18C .0405 STORAGE OF FINISHED WATER**

4 (a) Ground Level Storage

- 5 (1) Finished Water Ground Storage Tank. Finished water ground storage tanks shall be provided with  
6 a light-proof and insect-proof cover of concrete, ~~steel~~ steel, or equivalent material approved by the  
7 Division. The construction joints between side walls and the covers of concrete tanks or  
8 reservoirs shall be above ground level and above flood level; except that clearwells constructed  
9 below filters may be excepted from this requirement when total design, including waterproof  
10 joints, gives equal ~~protection.~~ protection from flooding.
- 11 (2) Access Manholes. The access manholes for finished water ground storage tanks or reservoirs shall  
12 be framed at least four inches above the tank or reservoir covers at the opening and shall be fitted  
13 with solid covers of materials that overlap the framed openings and extend down around the  
14 frames at least two inches. The covers for the openings shall be hinged at one side and fitted with  
15 a locking device.
- 16 (3) ~~Tanks or Reservoirs.~~ The tanks Venting. Finished water ground storage tanks or reservoirs shall  
17 have vents with screened, downward directed openings. The vent and screen shall be of corrosion  
18 resistant material.
- 19 (4) Overflow. The overflow pipes for finished water ground storage tanks or reservoirs shall not be  
20 connected directly to sewers or storm drains. Screens or other devices to prevent access by  
21 rodents, insects, etc. shall be provided in the overflow pipe.
- 22 (5) Inlets and Outlets. Water supply inlets and outlets of finished water ground storage tanks and  
23 reservoirs shall be located and designed to provide circulation of the water and to meet the CT  
24 requirements in Section .2000 of this Subchapter. Baffles shall be constructed where necessary to  
25 provide thorough circulation of the water.
- 26 (6) Drain Valves. All finished water ground storage tanks and reservoirs shall be equipped with drain  
27 valves.

28 (b) Elevated Storage Tanks:

- 29 (1) Standards. The specifications for elevated tanks, stand-pipes, towers, paints, ~~coatings~~ coatings,  
30 and other appurtenances shall meet the appropriate ANSI/AWWA Standards D 100 84 and D  
31 101-53(R86) of the American Water Works Association, ~~Inc., which Inc. that~~ are hereby  
32 incorporated by reference including any subsequent amendments and editions. ~~This material is~~  
33 ~~available for inspection at the Department of Environment, Health, and Natural Resources,~~  
34 ~~Division of Environmental Health, 1330 Saint Mary's Street, Raleigh, North Carolina. Non-~~  
35 ~~members may obtain copies from the American Water Works Association, 6666 W. Quiney~~  
36 ~~Avenue, Denver, Colorado 80235 at a cost of eighteen dollars and fifty cents (\$18.50) for D 100-~~

1 ~~84 and nine dollars (\$9.00) for D-101-53(R86). Copies are available for public inspection as set~~  
2 ~~forth in Rule 18C .0102 of this Subchapter.~~

3 (2) Elevation of Storage Tanks. The elevation of storage tanks shall be sufficient to produce a  
4 designed minimum distribution system pressure of 20 pounds per square inch at peak demand (fire  
5 flow) and 30 pounds per square inch during peak flow.

6 (3) Drain. Elevated storage tanks shall be equipped with drain valves.

7 (c) Hydropneumatic Storage Tanks (Pressure Tanks)

8 (1) Use of Pressure Tanks. Where well yields and pumping capacities are sufficient, hydropneumatic  
9 (pressure) tanks may be used to control pumps, stabilize ~~pressures~~ pressures, and provide a  
10 minimum of storage. Pressure tanks shall have the capacity to maintain a minimum pressure of 30  
11 pounds per square inch throughout periods of peak flow. Pressure tanks shall not be considered  
12 acceptable for meeting total storage requirements for water systems of over 300 connections,  
13 except as provided in Paragraph (d) of this Rule.

14 (2) Corrosion Control. Pressure tanks shall be galvanized after fabrication, provided with  
15 an ANSI/NSF approved liner or coating ~~coated~~ in accordance with Rule .1537 of this Subchapter.

16 (3) Required Parts. Pressure tanks shall have access manholes, bottom drains, pressure gauges, and  
17 properly sized safety and vacuum relief valves.

18 (4) Controls. Automatic ~~pressure~~, pressure and start-stop controls for operation of pumps shall be  
19 provided.

20 (5) Hydropneumatic Storage Tanks. Hydropneumatic storage tanks shall conform to the construction  
21 requirements for pressure vessels adopted by the North Carolina Department of Labor and  
22 codified in 13 NCAC 13 ~~which~~ that is hereby incorporated by reference including any subsequent  
23 amendments and editions. ~~Copies of the rules are available for inspection at the Department of~~  
24 ~~Environment, Health, and Natural Resources, Division of Environmental Health, 1330 Saint~~  
25 ~~Mary's Street, Raleigh, North Carolina. Copies may be obtained from the Boiler and Pressure~~  
26 ~~Vessel Division, North Carolina Department of Labor, 4 West Edenton Street, Raleigh, N.C.~~  
27 ~~27601 at a cost of fifteen dollars (\$15.00). Copies are available for public inspection as set forth in~~  
28 Rule 18C .0102 of this Subchapter.

29 (6) Appurtenances to hydropneumatic storage tanks such as valves, drains, gauges, sight tubes, safety  
30 devices, air-water volume controls, and chemical feed lines shall be protected against freezing.

31 (d) High Yield Aquifers:

32 (1) Equipment. In lieu of providing elevated storage for systems over 300 connections in areas where  
33 aquifers are known to produce high yields, e.g., 400-500 gpm from an eight-inch well, a system of  
34 extra well pumping capacity, auxiliary power generating equipment, hydropneumatic tanks,  
35 controls, ~~alarms~~ alarms, and monitoring systems may be provided. The design and installation of  
36 such system shall assure that reliable, continuous service is provided.

- 1 (2) Auxiliary Power. Such a system shall have an adequate number of wells equipped with sufficient  
2 pumping capacity so that the required flow rate ~~can~~ may be maintained with the single largest  
3 capacity well and pump out of operation. Auxiliary power generating equipment shall be provided  
4 for each well sufficient to operate the pump, lights, controls, chemical feeders, ~~alarms~~ alarms, and  
5 other electrical equipment as may be necessary.
- 6 (3) Pump Control. Hydropneumatic tanks designed in accordance with Paragraph (c) of this Rule and  
7 Section .0800 of this Subchapter shall be provided to maintain pressure and control the pump  
8 operation.
- 9 (4) Alarm System. An alarm system shall be provided ~~which~~ that will send a visual or audible signal  
10 to a constantly monitored location so that the water system operator will be advised of a primary  
11 power failure.

12

13 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*  
14 *Eff. January 1, 1977;*  
15 *Readopted Eff. December 5, 1977;*  
16 *Amended Eff. April 1, 2014; July 1, 1994; September 1, 1990; October 1, 1986; June 30, 1980.*

1 15A NCAC 18C .0406 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

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3 **15A NCAC 18C .0406 DISTRIBUTION SYSTEMS**

4 (a) Water Pipe Materials. Distribution mains shall be cast iron, ductile iron, asbestos-cement, reinforced  
5 concrete, ~~plastic~~ plastic, or other material designed for potable water system service and shall be the appropriate  
6 AWWA standards, section C, or NSF Standards No. 14 and No. 15 that is hereby incorporated by reference  
7 including any subsequent amendments and editions. ~~15, which is adopted by reference in accordance with G.S.~~  
8 ~~150B-14(e) or approved equal standards. Copies of AWWA standards are available from the American Water~~  
9 ~~Works Association, 6666 W. Quincy Avenue, Denver, Colorado 80235. Copies of NSF standards are available from~~  
10 ~~the National Sanitation Foundation, NSF Building, Ann Arbor, Michigan 48105. Copies are available for public~~  
11 ~~inspection at the principal address of the Division. Copies are available for public inspection as set forth in Rule 18C~~  
12 ~~.0102 of this Subchapter.~~ The pressure rating class of the pipe shall be in excess of the maximum design pressure  
13 within that section of the water distribution system. The quality of pipe to be used shall be stated in the project  
14 specifications.

15 (b) Cross-Connections

16 (1) No potable water supply shall be connected by any means ~~whatever~~ to another source of water  
17 supply or to a storage facility unless such connection has been previously approved by  
18 the ~~Division.~~ Department. No connection shall be made to any plumbing system that does not  
19 comply with the North Carolina State Building Code, volume II, or any applicable local plumbing  
20 code.

21 (2) No person shall introduce any water into the distribution system of a public water supply through  
22 any means other than from a source of supply duly approved by the Department or its  
23 representatives, or make a physical connection between an approved supply and unapproved  
24 supply unless authorized in an emergency by the Department or its representative.

25 (3) In cases where storage capacity is used only for non-potable purposes and there is installed either  
26 an elevated or ground tank or a ground reservoir, the following precautions shall be taken:

27 (A) When the reservoir or ~~elevated~~ tank is filled from a supply other than a public water  
28 supply and the public water supply is used as a supplemental supply, the pipeline from  
29 the public water supply shall be installed in such a manner that the water will be  
30 discharged over the top or rim of the reservoir or ~~elevated~~ tank. There shall be a  
31 complete physical break between the outlet end of the fill pipe and the top or overflow  
32 rim of the tank ~~or reservoir~~ of at least twice the inside diameter of the inlet pipe.

33 (B) When the ~~elevated tank or ground storage reservoir~~ reservoir or tank is filled entirely by  
34 water from a public water supply:

35 (i) If a covered ground reservoir or covered elevated ~~storage~~ tank is used, an  
36 approved reduced pressure back-flow preventor or an approved double check  
37 valve assembly may be used. The back-flow prevention device shall be installed

1 in such a manner as to afford adequate ~~protection and shall be easily accessible~~  
2 ~~and shall~~ protection, be easily accessible, and include all necessary pressure  
3 gauges and drains for testing. Gate valves shall be installed in the line at both  
4 ends of the back-flow prevention device.

5 (ii) If an uncovered ground reservoir or uncovered elevated ~~storage~~ tank is used, a  
6 complete physical break shall be provided between the reservoir or elevated tank  
7 and the public supply. The physical break between the inlet pipe and the top or  
8 overflow rim of the reservoir shall be at least twice the diameter of the inlet  
9 pipe.

10 (4) All cross-connections between potable water supplies and non-potable or unprotected  
11 supplies ~~which~~ that are not specifically covered in the categories in this Paragraph will be  
12 considered as special problems and the protective devices required ~~will~~ shall be determined by the  
13 Department on the basis of the degree of health hazard involved.

14 (5) Persons desiring to install non-potable water supplies in conjunction with a public water supply  
15 shall submit ~~to the public water supply section, Division of Environmental Health,~~ detailed plans  
16 and specifications in triplicate showing the non-potable water supply and its relation to the potable  
17 water ~~supply.~~ supply to the Department in accordance with Rule .0302(a) of this Subchapter.

18 (6) Any such interconnection to a potable water system is subject to the approval of the water supplier  
19 and shall not be made until authorized by the water supplier in addition to the Department.

20 (7) No person shall fill special use tanks or tankers containing pesticides, fertilizers, other  
21 toxic ~~chemicals~~ chemicals, or their residues from a public water system except at a location  
22 equipped with an over-the-rim free discharge of water or ~~an approved~~ a reduced pressure backflow  
23 preventer properly installed on the public water ~~supply.~~ supply that has been approved by the  
24 Department. No supplier of water shall permit the filling of such special use ~~containers~~ tanks or  
25 tankers except at locations so equipped.

26  
27 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*  
28 *Eff. January 1, 1977;*  
29 *Readopted Eff. December 5, 1977;*  
30 *Amended Eff. April 1, 2014; September 1, 1990; December 1, 1988; June 30, 1980.*

1 15A NCAC 18C .0706 is amended pursuant to G.S. 150B-21.5(a)(2) as follows:

2

3 **15A NCAC 18C .0706 SEDIMENTATION BASIN**

4 (a) Inlets. Inlets to sedimentation basins shall be designed to dissipate inlet velocities before the diffusion walls or  
5 before other entrance arrangements designed to provide uniform flow across the basins.

6 (b) Detention Period. A theoretical detention period of four hours shall be considered to be a minimum standard  
7 unless evidence, acceptable to the Division of ~~Environmental Health~~, Water Resources, is presented to support  
8 approval of a lower period of detention.

9 (c) Bottom of Basin. The bottom of the basin shall be ~~adequately~~ sloped and provided with drain valve or valves  
10 for ready removal of sludge.

11 (d) Outlet. Sedimentation basin outlets shall consist of submerged weirs or orifices. The equivalent rate of flow  
12 over or through the outlet device should not exceed 20,000 gallons per day per foot of equivalent weir length.

13 (e) Overflow. ~~The sedimentation~~ Sedimentation basins shall be equipped with an overflow pipe or pipes to limit the  
14 maximum water level over the filters and to prevent flooding above the walls of filters and basins.

15

16 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*

17 *Eff. January 1, 1977;*

18 *Readopted Eff. December 5, ~~1977~~1977;*

19 *Amended Eff. April 1, 2014.*

1 15A NCAC 18C .0715 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2  
3 **15A NCAC 18C .0715 OTHER DESIGN STANDARDS**

4 In evaluation of water systems or water system design features not addressed in this Section, the Department shall  
5 consider standards from the American Water Works Association or Recommended Standards for Water Works of 10  
6 states and ~~Ontario. A copy of the American Water Works Association standards is available for inspection at the~~  
7 ~~Public Water Supply Section, 1330 St. Mary's Street, Raleigh, North Carolina. Non members may obtain a set of~~  
8 ~~the standards from the American Water Works Association, 6666 W. Quincy Avenue, Denver, Colorado 80235 at a~~  
9 ~~cost of six hundred and ten dollars (\$610.00). Ontario, that is hereby incorporated by reference including any~~  
10 ~~subsequent amendments and editions. Copies are available for public inspection as set forth in Rule 18C .0102 of~~  
11 ~~this Subchapter.~~

12 ~~A copy of the Recommended Standards for Water Works for 10 States and Ontario is available for inspection at the~~  
13 ~~Public Water Supply Section, 1330 Saint Mary's Street, Raleigh, North Carolina. Copies of these standards may be~~  
14 ~~obtained from Health Education Services, P.O. Box 7126, Albany, New York 12224 at a cost of eight dollars and~~  
15 ~~fifty cents (\$8.50) each (including postage). Prices may vary for multiple copies because of postage. Prepayment is~~  
16 ~~required by the vendor.~~

17  
18 History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;

19 *Eff. July 1, 1994, 1994.*

20 *Amended Eff. April 1, 2014.*



1 15A NCAC 18C .0802 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .0802 CAPACITIES: DETERMINING PEAK DEMAND**

4 (a) The following ~~charts, charts~~ shall be used to determine the peak demand for ~~residential communities, mobile~~  
5 ~~home parks, and campgrounds:~~ campground, residential community, and mobile home park water systems:

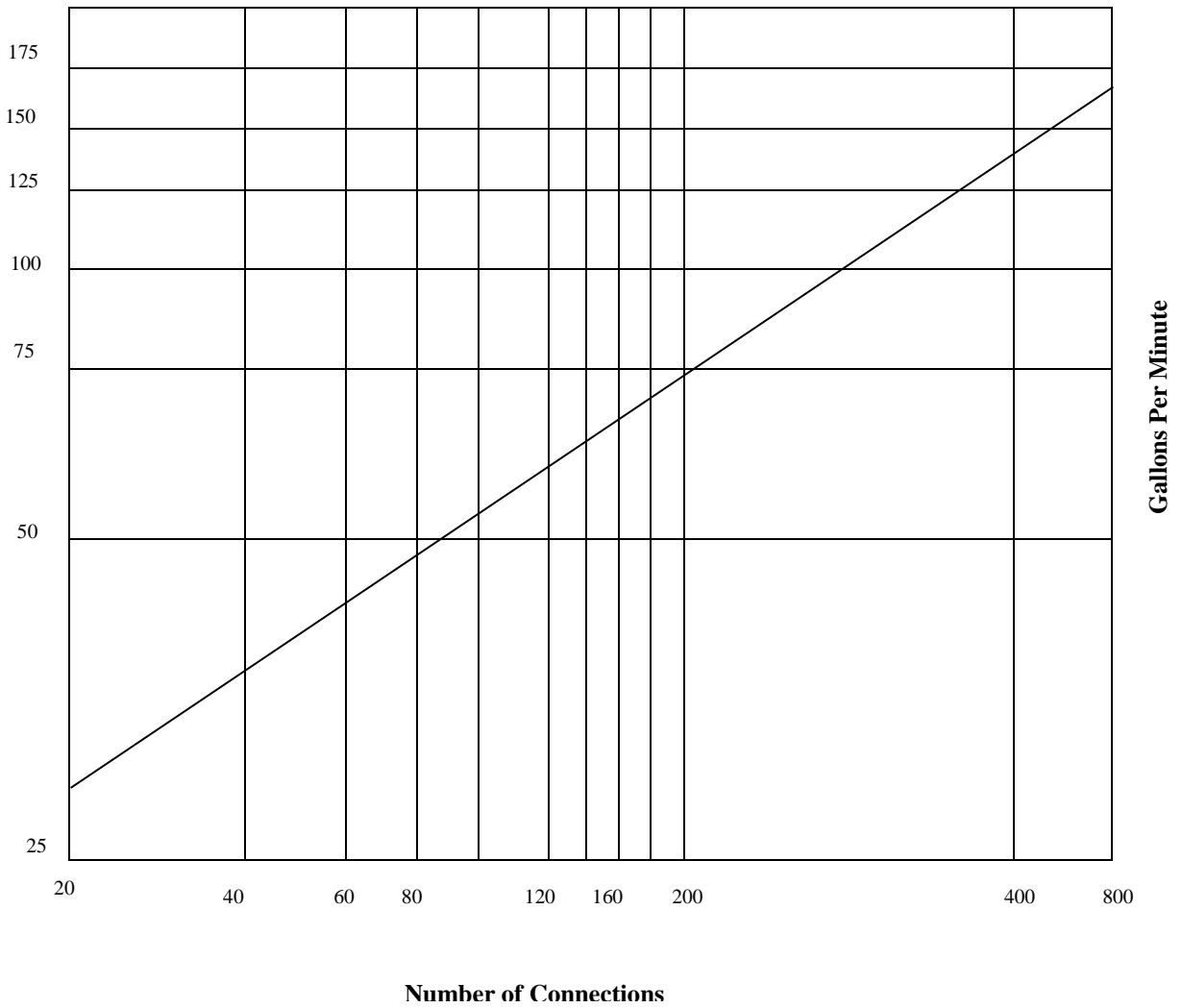
6

7 **PEAK DEMAND FOR CAMPGROUND WATER SYSTEMS**

8

(Number of Connections vs Gallons per Minute)

9



10

11

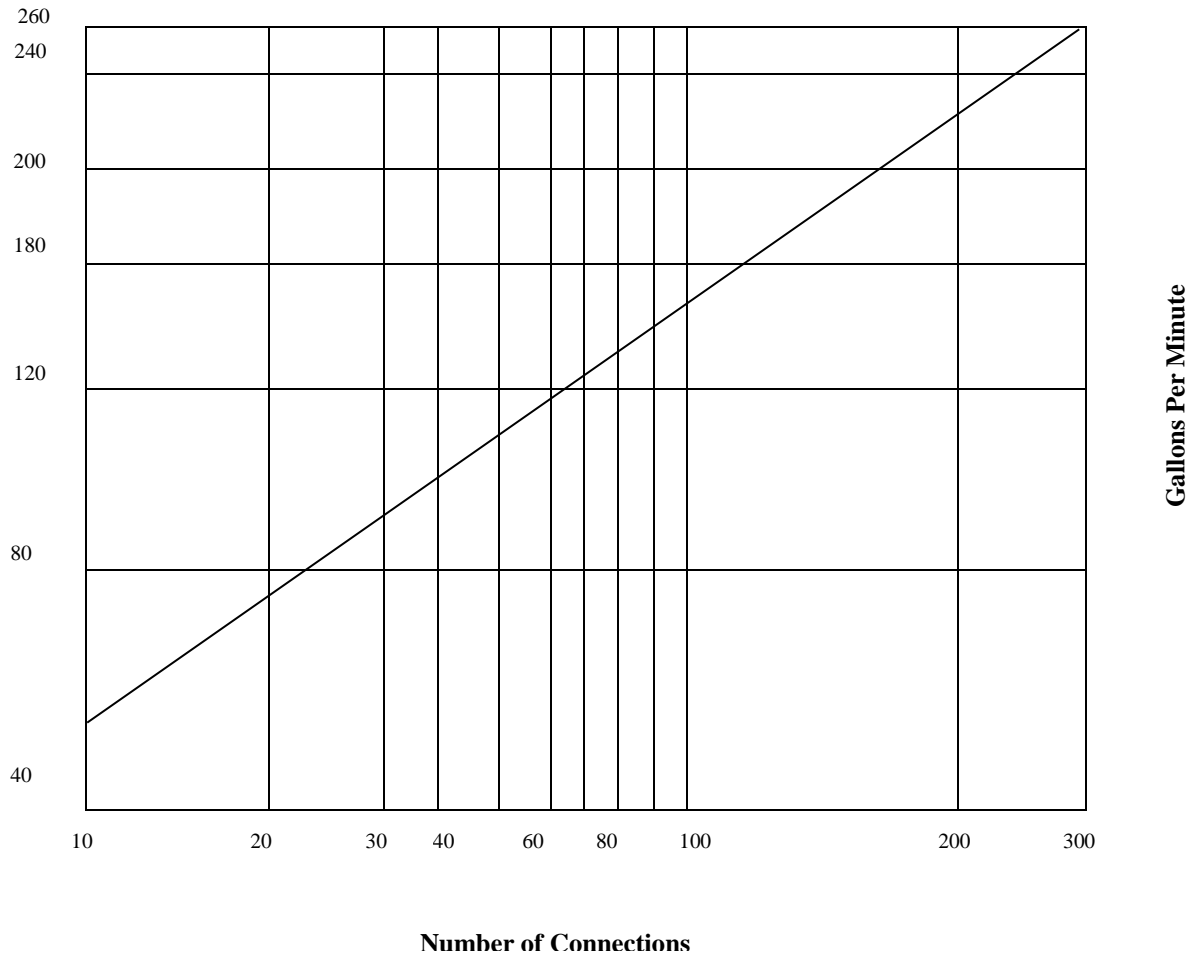
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13

14

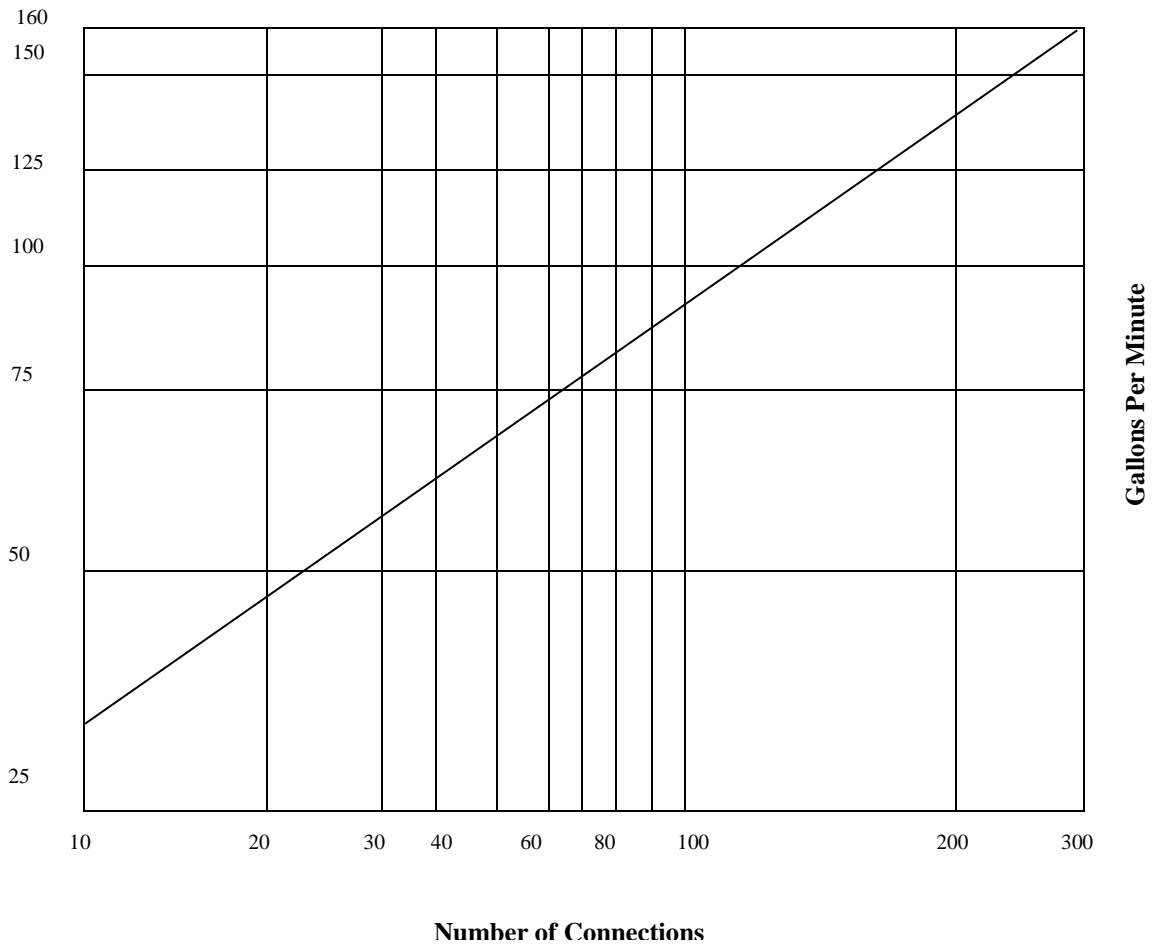
1  
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9

PEAK DEMAND FOR RESIDENTIAL COMMUNITY WATER SYSTEMS  
(Number of Connections vs Gallons per Minute)



1 PEAK DEMAND FOR MOBILE HOME PARK WATER SYSTEMS

2 (Number of Connections vs Gallons per Minute)



9 (b) The peak demand for non-transient, non-community water systems shall be determined based on the total  
10 demand weight of fixtures in accordance with the procedures of the North Carolina State Building Code, Volume II,  
11 Plumbing Section ~~which that~~ are hereby incorporated by reference including any subsequent amendments and  
12 editions. ~~This material is available for inspection at the Department of Environment, Health, and Natural Resources,~~  
13 ~~Division of Environmental Health, 1330 Saint Mary's Street, Raleigh, North Carolina. Copies may be obtained from~~  
14 ~~the North Carolina Department of Insurance, Engineering Division, 410 North Boylan Avenue, Raleigh, North~~  
15 ~~Carolina at a cost of forty five dollars (\$45.00) per copy. Copies are available for public inspection as set forth in~~  
16 Rule 18C .0102 of this Subchapter.

17

18 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*  
19 *Eff. January 1, 1977;*  
20 *Readopted Eff. December 5, 1977;*

*Amended Eff. April 1, 2014; July 1, 1994; June 30, 1980.*

1 15A NCAC 18C .0805 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .0805 CAPACITIES: ELEVATED STORAGE**

4 (a) Where feasible, elevated storage capacity shall meet the requirements of the ISO Commercial Risk Services,  
5 Inc. Fire Suppression Rating Schedule ~~which that~~ are hereby incorporated by reference including any subsequent  
6 amendments and editions. ~~This material is available for inspection at the Department of Environment, Health, and~~  
7 ~~Natural Resources, Division of Environmental Health, 1330 St. Mary's Street, Raleigh, North Carolina. Copies may~~  
8 ~~be obtained from ISO Commercial Risk Services, Incorporated, Accounting Division, 7 World Trade Center, New~~  
9 ~~York, New York 10048 at a cost of forty dollars (\$40.00) per copy. Copies are available for public inspection as set~~  
10 forth in Rule 18C .0102 of this Subchapter.

11 (b) The elevated storage capacity for a municipality shall be sufficient to minimize the effect of fluctuating  
12 demand ~~plus~~ and provide a reserve for fire protection, but not be less than 75,000 gallons in capacity.

13 (c) The combined elevated and ground storage capacity of the finished water for community and non-transient, non-  
14 community water systems shall be a minimum of one-half day's supply of the average annual daily demand.

15

16 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*

17 *Eff. January 1, 1978;*

18 *Amended Eff. April 1, 2014; July 1, 1994.*

1 15A NCAC 18C .0907 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .0907 VALVES**

4 (a) Valves should be installed on all branches from feeder ~~mains~~ mains, and between mains and hydrants according  
5 to the following schedule:

- 6 (1) three valves at x (crosses),
- 7 (2) two valves at T's (tees), and
- 8 (3) one valve on single hydrant branch.

9 (b) All valves installed in water distribution systems ~~should~~ shall meet the appropriate AWWA Standards C 500-71  
10 (adopted in ~~1971~~) 1971), C 504-74 (adopted in ~~1974~~) 1974), and C 507-73 (adopted in 1973) of the American Water  
11 Works Association, Inc., that are incorporated by reference including any subsequent amendments or editions. ~~Ine.,~~  
12 ~~or approved equal standards. Copies of AWWA standards are available from the American Water Works~~  
13 ~~Association, 6666 W. Quincy Avenue, Denver, Colorado 80235, at a cost of one hundred forty dollars (\$140.00)~~  
14 ~~per complete set for non members or seventy dollars (\$70.00) for members. Copies are available for public~~  
15 ~~inspection at the principal address of the Public Water Supply Section, Division of Environmental Health. Copies~~  
16 are available for public inspection as set forth in Rule 18C .0102 of this Subchapter. ~~Further, all~~ All valves must be  
17 installed in such a manner as to be readily accessible, preferably, the use of an appropriate valve box and cover.

18

19 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*  
20 *Eff. January 1, 1977;*  
21 *Readopted Eff. December 5, 1977;*  
22 *Amended Eff. April 1, 2014; March 31, 1980.*

1 15A NCAC 18C .1204 is amended pursuant to G.S. 150B-21.5(a)(2) as follows:

2

3 **15A NCAC 18C .1204 FISHING**

4 (a) Fishing shall not be permitted on any Class I or Class II public water supply reservoir without a resolution  
5 granting permission by the Commission for Public Health. In order to obtain permission, a written application shall  
6 be submitted by the owner of the water supply to the Commission for Public Health. Permission shall not be issued  
7 until an investigation has been made by an authorized representative of the Division of ~~Environmental Health~~ Water  
8 Resources and a determination made that fishing in the reservoir ~~will~~ shall not adversely affect the water quality.

9 (b) The application requesting permission to fish in any reservoir shall be accompanied by sufficient evidence (such  
10 as ordinances adopted by the applicant) to insure that the following requirements ~~will~~ shall be enforced by the  
11 applicant:

12 (1) Fishing ~~will~~ shall be permitted only from boats owned or controlled by the applicant. Boats will at  
13 all times be under the supervision and jurisdiction of a responsible representative of the applicant.  
14 Bank fishing may be permitted in restricted supervised areas with proper sanitation facilities  
15 when ~~specifically~~ included as a specific, listed activity and approved by the Commission for  
16 Public Health.

17 (2) A sufficient number of wardens and watershed inspectors ~~will~~ shall be employed at all times to  
18 insure that no acts of urination, ~~defecation~~ defecation, or other acts which would defile the water  
19 supply are committed by any person while fishing in the public water supply reservoir.

20 (3) A ~~fishing dock, or docks,~~ dock shall be provided or controlled by the applicant for the purpose  
21 of docking fishing boats. No boat shall enter or leave the reservoir except from a ramp owned or  
22 controlled by the applicant.

23

24 *History Note: Authority G.S. 130A-315; 130A-320; P.L. 93-523;*

25 *Eff. January 1, 1977;*

26 *Readopted Eff. December 5, 1977;*

27 *Amended Eff. September 1, 1979;*

28 *Transferred and Recodified from 10 NCAC 10D .1303 Eff. April 4, 1990;*

29 *Amended Eff. April 1, 2014; September 1, 1990.*

1 15A NCAC 18C .1406 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2  
3 **15A NCAC 18C .1406 CONTROL OF TREATMENT PROCESS**

4 (a) The treatment process shall result in the adjustment of fluoride ion ~~(F)~~ (F<sup>-</sup>) in the treated water to 1.0 mg/liter.

5 (b) A water treatment plant ~~operator, having qualifications acceptable to the controlling health agencies, operator~~  
6 certified under 15A NCAC 18D shall conduct the necessary chemical analyses and supervise application of the  
7 fluoride.

8 (c) ~~An adequate number of samples~~ Samples shall be collected and analyzed from points before and after  
9 fluoridation and from one or more points in the distribution system. The minimum number of control tests required  
10 and the number of check samples to be collected and submitted to the ~~Division of Laboratory Services North~~  
11 Carolina State Laboratory of Public Health for analysis shall be determined by the ~~controlling health agencies in~~  
12 each instance. Department in conjunction with the State Health Director, based on guidance from the Center for  
13 Disease Control, and considering recommendations from the local health department and the supplier of water.

14 (d) The fluoride content of the water shall be determined in accordance with methods in Rule .1508 of this  
15 Subchapter.

16 (e) Accurate records of the amount of fluoride applied to the water and the results of all fluoride analyses shall be  
17 recorded on forms approved by the Department and submitted to the Department weekly.

18 (f) ~~The manufacturer shall submit a certified copy of the chemical analysis of the product offered for sale. Test for~~  
19 ~~the purity of the chemical shall include the U.S. Pharmacopoeia tests for heavy metals which are incorporated by~~  
20 ~~reference including any subsequent amendments or editions. A copy is available for inspection at the Department of~~  
21 ~~Environment, Health, and Natural Resources, Division of Environmental Health, Public Water Supply Section, 1330~~  
22 ~~Saint Mary's Street, Raleigh, North Carolina. Copies may be obtained from the Division of Consumers Union of~~  
23 ~~U.S., Incorporated, 101 Truman Avenue, Yonkers, New York 10703 at a cost of thirty nine dollars and ninety five~~  
24 ~~cents (\$39.95). Any fluoridation product used by a water system shall meet the requirements of Rule .1537 of this~~  
25 Subchapter.

26  
27 *History Note: Authority G.S. 90A-29; G.S. 130A-316;*

28 *Eff. February 1, 1976;*

29 *Readopted Eff. December 5, 1977;*

30 *Amended Eff. April 1, 2014; July 1, 1994; September 1, 1990; December 17, 1979.*



1 15A NCAC 18C .1505 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .1505 TURBIDITY SAMPLING AND ANALYSIS**

4 The requirements of this Rule shall apply only to public water systems that use water obtained in whole or in part  
5 from surface sources. The provisions of 40 C.F.R. 141.22 are hereby incorporated by reference including any  
6 subsequent amendments and editions. ~~This material is available for inspection at the Department of Environment  
7 and Natural Resources, Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina.  
8 Copies may be obtained from the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-  
9 426-4791 or from EPA's homepage at <http://www.epa.gov/OGWDW/>.~~ Copies are available for public inspection as  
10 set forth in Rule 18C .0102 of this Subchapter. Any dates set forth in the federal rule shall be applicable.

11

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

13 *Eff. September 1, 1979;*

14 *Amended Eff. March 31, 1981; December 19, 1979;*

15 *Transferred and Recodified from 10 NCAC 10D .1623 Eff. April 4, 1990;*

16 *Amended Eff. April 1, 2014; August 1, 2002; January 1, 1991; September 1, 1990.*

1 15A NCAC 18C .1506 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .1506 MAXIMUM CONTAMINANT LEVELS FOR TURBIDITY**

4 The requirements of this Rule shall apply to public water systems that use water obtained in whole or in part from  
5 surface water sources. The provisions of 40 C.F.R. 141.13 are hereby incorporated by reference including any  
6 subsequent amendments and editions. ~~This material is available for inspection at the Department of Environment  
7 and Natural Resources, Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina.  
8 Copies may be obtained from the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-  
9 426-4791 or from EPA's homepage at <http://www.epa.gov/OGWDW/>.~~ Copies are available for public inspection as  
10 set forth in Rule 18C .0102 of this Subchapter. Any dates set forth in the federal rule shall be applicable.

11

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

13 *Eff. September 1, 1979;*

14 *Transferred and Recodified from 10 NCAC 10D .1614 Eff. April 4, 1990;*

15 *Amended Eff. April 1, 2014; August 1, 2002; January 1, 1991; September 1, 1990.*

1 15A NCAC 18C .1507 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2  
3 **15A NCAC 18C .1507 CORROSION CONTROL AND LEAD AND COPPER MONITORING**

4 (a) Control and adjustment of pH shall be provided for community water systems having water with a pH below  
5 6.5; such control and adjustment to be approved by the Department. Most waters are corrosive in varying degrees at  
6 pH 6.5 and slightly ~~above~~ above, and such waters may have pH adjustment.

7 (b) The provisions of 40 C.F.R. 141.42 are hereby incorporated by reference including any subsequent amendments  
8 and editions. ~~This material is available for inspection at the Department of Environment, Health, and Natural~~  
9 ~~Resources, Division of Environmental Health, 1330 Saint Mary's Street, Raleigh, North Carolina. Non members~~  
10 ~~may obtain copies from the American Water Works Association, Information Services, 6666 West Quincy Avenue,~~  
11 ~~Denver, Colorado 80235 at a cost of fifteen dollars (\$15.00) up to 20 pages and thirty cents (\$0.30) per page for~~  
12 ~~each additional page. Copies are available for public inspection as set forth in Rule 18C .0102 of this Subchapter.~~

13 (c) The provisions of 40 C.F.R. 141, Subpart I - Control of Lead and Copper are hereby incorporated by reference  
14 including any subsequent amendments and editions. ~~This material is available for inspection at the Department of~~  
15 ~~Environment, Health, and Natural Resources, Division of Environmental Health, 1330 Saint Mary's Street, Raleigh,~~  
16 ~~North Carolina. Non members may obtain copies from the American Water Works Association, Information~~  
17 ~~Services, 6666 West Quincy Avenue, Denver Colorado 80235 at a cost of fifteen dollars (\$15.00) up to 20 pages and~~  
18 ~~thirty cents (\$0.30) per page for each additional page. Copies are available for public inspection as set forth in Rule~~  
19 ~~18C .0102 of this Subchapter.~~

20 (d) Travel trailer parks, campgrounds, and marina slips that are community water systems as defined by G.S. 130A-  
21 313(10), but do not serve 25 or more of the same persons more than six months per ~~year~~ year, shall be exempt from  
22 the provisions of this Rule.

23  
24 *History Note:* Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;  
25 Eff. September 1, 1979;  
26 Amended Eff. October 1, 1982; February 27, 1982;  
27 Transferred and Recodified from 10 NCAC 10D .1621 Eff. April 4, 1990;  
28 Amended Eff. April 1, 2014; July 1, 1994; October 1, 1992; December 1, 1991.

1 15A NCAC 18C .1508 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2  
3 **15A NCAC 18C .1508 INORGANIC CHEMICAL SAMPLING AND ANALYSIS**

4 The provisions of 40 C.F.R. 141.23 are hereby incorporated by reference including any subsequent amendments and  
5 editions. ~~This material is available for inspection at the Department of Environment, Health, and Natural Resources,~~  
6 ~~Division of Environmental Health, 1330 Saint Mary's Street, Raleigh, North Carolina. Non members may obtain~~  
7 ~~copies from the American Water Works Association, Information Services, 6666 West Quincy Avenue, Denver,~~  
8 ~~Colorado 80235 at a cost of fifteen dollars (\$15.00) up to 20 pages and thirty cents (\$0.30) per page for each~~  
9 ~~additional page.~~ Copies are available for public inspection as set forth in Rule 18C .0102 of this Subchapter. In  
10 addition, two or more water systems that are adjacent and are owned or operated by the same supplier of water and  
11 that together serve 15 or more service connections or 25 or more persons shall conform to the following  
12 sampling schedule. ~~A water supplier shall submit samples every three years from each section of the water system~~  
13 ~~supplied from a separate source. Travel trailer parks, campgrounds, and marina slips that are community water~~  
14 ~~systems as defined by G.S. 130A-313(10), but do not serve 25 or more of the same people more than six months per~~  
15 ~~year shall monitor as specified for transient non-community water systems.~~ schedule:

16 (a) a water supplier shall submit samples every three years from each section of the water system  
17 supplied from a separate source, and

18 (b) travel trailer parks, campgrounds, and marina slips that are community water systems as defined  
19 by G.S. 130A-313(10), but do not serve 25 or more of the same people more than six months per  
20 year shall monitor as specified for transient non-community water systems.

21  
22 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;*  
23 *Eff. September 1, 1979;*  
24 *Amended Eff. March 1, 1989; February 1, 1987; October 1, 1986; April 1, 1983;*  
25 *Transferred and Recodified from 10 NCAC 10D .1625 Eff. April 4, 1990;*  
26 *Amended Eff. April 1, 2014; July 1, 1994; April 1, 1992; December 1, 1991.*

1 15A NCAC 18C .1509 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2  
3 **15A NCAC 18C .1509 SPECIAL MONITORING FOR SODIUM**

4 (a) Suppliers of water for community water systems shall collect and analyze one sample per plant at the entry point  
5 of the distribution system for the determination of sodium concentration levels. Samples must be collected and  
6 analyzed annually for systems utilizing surface water sources in whole or in part, and at least every three years for  
7 systems utilizing solely ground water sources. The minimum number of samples required to be taken by the system  
8 shall be based on the number of treatment plants used by the system, except that multiple wells drawing raw water  
9 from a single aquifer may, with Department approval, be considered one treatment plant for determining the  
10 minimum number of samples. The supplier of water may be required by the Department to collect and analyze  
11 water samples for sodium more frequently in locations where the sodium content is variable.

12 (b) ~~The supplier of water~~ Suppliers of water for community water systems shall report to the Department the results  
13 of the analyses for sodium within the first 10 days of the month following the month in which the sample results  
14 were received or within the first 10 days following the end of the required monitoring period as stipulated by the  
15 Department, whichever is first. If more than annual sampling is ~~required~~ required, the supplier shall report the  
16 average sodium concentration within 10 days of the month following the month in which the analytical results of the  
17 last sample used for the annual average was received.

18 (c) The Department shall notify appropriate local health officials of the sodium levels found in community water  
19 systems.

20 (d) Analyses conducted to determine compliance with this Rule shall be made in accordance with methods adopted  
21 by the United States Environmental Protection Agency and codified as 40 C.F.R. 141.41(d) ~~which that~~ are hereby  
22 incorporated by reference including any subsequent amendments and editions. ~~This material is available for~~  
23 ~~inspection at the Department of Environment, Health, and Natural Resources, Division of Environmental Health,~~  
24 ~~1330 Saint Mary's Street, Raleigh, North Carolina. Non members may obtain copies from the American Water~~  
25 ~~Works Association, Information Services, 6666 West Quincy Avenue, Denver, Colorado 80235 at a cost of fifteen~~  
26 ~~dollars (\$15.00) up to 20 pages and thirty cents (\$0.30) per page for each additional page. Copies are available for~~  
27 public inspection as set forth in Rule 18C .0102 of this Subchapter.

28 (e) Travel trailer parks, campgrounds, and marina slips that are community water systems as defined by G.S. 130A-  
29 313(10), but do not serve 25 or more of the same persons more than six months per year shall be exempt from the  
30 provisions of this Rule.

31  
32 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;*  
33 *Eff. February 27, 1982;*  
34 *Transferred and Recodified from 10 NCAC 10D .1636 Eff. April 4, 1990;*  
35 *Amended Eff. April 1, 2014; July 1, 1994; September 1, 1990.*

1 15A NCAC 18C .1510 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2  
3 **15A NCAC 18C .1510 MAXIMUM CONTAMINANT LEVELS FOR INORGANIC CHEMICALS**

4 (a) The provisions of 40 C.F.R. 141.11 are hereby incorporated by ~~reference~~, reference including any subsequent  
5 amendments and editions, except the maximum contaminant level for arsenic shall be regulated as set forth in  
6 Paragraph (c) of this Rule. ~~This material is available for inspection at the Department of Environment and Natural  
7 Resources, Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies may be  
8 obtained from the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-426-4791 or from  
9 USEPA's homepage at <http://www.epa.gov/safewater>. Copies are available for public inspection as set forth in Rule  
10 18C .0102 of this Subchapter.~~

11 (b) The provisions of 40 C.F.R. 141.62 are hereby incorporated by reference including any subsequent amendments  
12 and editions. ~~This material is available for inspection at the Department of Environment and Natural Resources,  
13 Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from  
14 the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-426-4791 or from USEPA's  
15 homepage at <http://www.epa.gov/safewater>. Copies are available for public inspection as set forth in Rule 18C  
16 .0102 of this Subchapter.~~

17 (c) Effective January 1, 2002, the maximum contaminant level for arsenic applies to community and non-transient  
18 non-community water systems are as follows:

- 19 (1) The maximum contaminant level for arsenic is 0.010 milligrams per liter, until such time as the  
20 USEPA revises the standard to a level lower than 0.010 milligrams per liter at which time the  
21 more stringent level shall apply.
- 22 (2) Sampling, analytical requirements, and compliance calculations for arsenic shall be conducted as  
23 specified for ~~the~~ contaminants in ~~15A NCAC 18C .1508. Rule .1508 of this Subchapter.~~
- 24 (3) Certified laboratories must report quantifiable results down to at least 0.005 milligrams  
25 per liter. ~~liter for arsenic compliance samples effective January 1, 2002.~~
- 26 (4) ~~Water systems with arsenic in excess of the maximum contaminant level from the latest  
27 compliance sample must submit by January 1, 2005 a compliance schedule to the Division of  
28 Environmental Health, Public Water Supply Section stating the alternative solution that has been  
29 selected, the actions to be taken, and the deadline for those actions in order to meet the revised  
30 standard by the compliance date. The system must be in compliance with the MCL by January 23,  
31 2006. In the interim period, the water system shall provide public notice pursuant to 15A NCAC  
32 18C .1523. Exceedence of the maximum contaminant level shall be reported in the Consumer  
33 Confidence Report pursuant to 15A NCAC 18C .1538.~~

34  
35 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;*  
36 *Eff. September 1, 1979;*  
37 *Amended Eff. October 1, 1986; October 1, 1982; April 1, 1982; March 31, 1981;*

1                    *Transferred and Recodified from 10 NCAC 10D .1616 Eff. April 4, 1990;*  
2                    *Amended Eff. April 1, 1992;*  
3                    *Temporary Amendment Eff. January 1, 2002;*  
4                    *Amended Eff. April 1, 2014; April 1, 2003.*

1 15A NCAC 18C .1515 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .1515 ORGANIC CHEMICALS OTHER THAN TTHM, SAMPLING AND ANALYSIS**

4 (a) The requirements of this Rule shall apply to community and non-transient non-community water systems. The  
5 provisions of 40 C.F.R. 141.24 are hereby incorporated by reference including any subsequent amendments and  
6 editions. ~~This material is available for inspection at the Department of Environment and Natural Resources, Division  
7 of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from the  
8 Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-426-4791 or from EPA's homepage  
9 at <http://www.epa.gov/OGWDW/>. Copies are available for public inspection as set forth in Rule 18C .0102 of this  
10 Subchapter.~~ Any dates set forth in the federal rule shall be applicable.

11 (b) If the result of an analysis made pursuant to Paragraph (a) of this Rule indicates that the level of any  
12 contaminant listed in ~~15A NCAC 18C .1517~~ Rule 18C .1517 of this Subchapter exceeds the maximum contaminant  
13 level, the supplier of water shall report to the Department within 48 hours and initiate three additional analyses  
14 within one month.

15

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

17 *Eff. September 1, 1979;*

18 *Amended Eff. November 1, 1989; December 1, 1988; June 1, 1988; October 1, 1982;*

19 *Transferred and Recodified from 10 NCAC 10D .1624 Eff. April 4, 1990;*

20 *Amended Eff. April 1, 2014; August 1, 2002; April 1, 1992; December 1, 1991; September 1,*  
21 *1990.*



1 15A NCAC 18C .1516 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2  
3 **15A NCAC 18C .1516 SPECIAL MONITORING FOR INORGANIC AND ORGANIC CHEMICALS**

4 (a) The provisions of 40 C.F.R. 141.40 are hereby incorporated by reference including any subsequent amendments  
5 and editions, except that 40 C.F.R. 141.40(n)(10) is not adopted. ~~This material is available for inspection at the~~  
6 ~~Department of Environment, Health, and Natural Resources, Division of Environmental Health, 1330 Saint Mary's~~  
7 ~~Street, Raleigh, North Carolina. Non members may obtain copies from the American Water Works Association,~~  
8 ~~Information Services, 6666 West Quincy Avenue, Denver, Colorado 80235 at a cost of fifteen dollars (\$15.00) up to~~  
9 ~~20 pages and thirty cents (\$0.30) per page for each additional page. Copies are available for public inspection as set~~  
10 ~~forth in Rule 18C .0102 of this Subchapter.~~

11 (b) To comply with the monitoring requirements of this ~~Rule~~ Rule, a community water system or non-transient,  
12 non-community water system serving fewer than 150 service connections shall take a single water sample to be  
13 analyzed for inorganic and organic chemicals.

14 (c) Travel trailer parks, campgrounds, and marina slips that are community water systems as defined by G.S. 130A-  
15 313(10), but do not serve 25 or more of the same persons more than six months per year shall be exempt from the  
16 provisions of this Rule.

17  
18 *History Note:* Authority G.S. 130A-313; G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;

19 *Eff. June 1, 1988;*

20 *Amended Eff. November 1, 1989;*

21 *Transferred and Recodified from 10 NCAC 10D .1638 Eff. April 4, 1990;*

22 *Amended Eff. April 1, 2014; July 1, 1994; April 1, 1992; December 1, 1991; August 1, 1990.*

1 15A NCAC 18C .1517 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .1517 MAXIMUM CONTAMINANT LEVELS FOR ORGANIC CHEMICALS**

4 The provisions of 40 C.F.R. 141.12 are hereby incorporated by reference including any subsequent amendments and  
5 editions. However, the maximum contaminant level for total trihalomethanes shall apply to all community water  
6 systems and non-transient, non-community water ~~systems~~ systems, regardless of ~~population~~ which population, that  
7 add a disinfectant (oxidant) to the water in any part of the drinking water treatment process. ~~This material is~~  
8 ~~available for inspection at the Department of Environment, Health, and Natural Resources, Division of~~  
9 ~~Environmental Health, 1330 Saint Mary's Street, Raleigh, North Carolina. Non members may obtain copies from~~  
10 ~~the American Water Works Association, Information Services, 6666 West Quiney Avenue, Denver, Colorado 80235~~  
11 ~~at a cost of fifteen dollars (\$15.00) up to 20 pages and thirty cents (\$0.30) per page for each additional page. Copies~~  
12 are available for public inspection as set forth in Rule 18C .0102 of this Subchapter.

13

14 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;*  
15 *Eff. September 1, 1979;*  
16 *Amended Eff. September 30, 1980;*  
17 *Transferred and Recodified from 10 NCAC 10D .1615 Eff. April 4, 1990;*  
18 *Amended Eff. April 1, 2014; April 1, 1992; August 1, 1990.*

1 15A NCAC 18C .1519 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2  
3 **15A NCAC 18C .1519 MONITORING FREQUENCY FOR RADIOACTIVITY**

4 (a) The requirements of this Rule shall apply to community water systems. The provisions of 40 C.F.R. 141.26 are  
5 hereby incorporated by reference including any subsequent amendments and editions. ~~This material is available for~~  
6 ~~inspection at the Department of Environment and Natural Resources, Division of Environmental Health, 2728~~  
7 ~~Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from the Environmental Protection Agency's~~  
8 ~~(USEPA) Drinking Water Hotline at 1 800 426 4791 or from EPA's homepage at~~  
9 ~~<http://www.epa.gov/OGWDW/>.~~ Copies are available for public inspection as set forth in Rule 18C .0102 of this  
10 Subchapter. Any dates set forth in the federal rule shall be applicable.

11 (b) An adjacent water system as defined in G.S. ~~130A-315(b2)~~ shall 130A-315(b2) shall conform to the following  
12 sampling schedule as set in paragraph (c) rather than the schedule set forth in 40 C.F.R. 141.26(a) and (b). ~~A water~~  
13 ~~supplier shall take samples for gross alpha particle activity, radium 226, radium 228, and uranium, and for~~  
14 ~~man-made radioactivity from the water system when the Secretary determines that the system is in an area subject to~~  
15 ~~radiological contamination. When the sampling is required, a water supplier shall submit samples every four years~~  
16 ~~from each section of the water system supplied from a separate source.~~

17 (c) When the Secretary determines that the system is in an area subject to radiological contamination, a water  
18 supplier shall take samples for the following contaminants:

- 19 (1) gross alpha particle activity;  
20 (2) radium-226;  
21 (3) radium-228;  
22 (4) uranium; and  
23 (5) man-made radioactivity from the water system.

24 When the sampling is required, a water supplier shall submit samples every four years from each section of the  
25 water system supplied from a separate source.

26 (↔) (d) Travel trailer parks, campgrounds, and marina slips that are community water systems as defined by G.S.  
27 130A-313(10), but do not serve 25 or more of the same persons more than six months per year shall monitor the  
28 same as required by adjacent systems in Paragraph (b) of this Rule.

29  
30 *History Note: Authority G.S. 130A-313; G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;*  
31 *Eff. September 1, 1979;*  
32 *Amended Eff. March 1, 1989; September 9, 1980; December 19, 1979;*  
33 *Transferred and Recodified from 10 NCAC 10D .1627 Eff. April 4, 1990;*  
34 *Amended Eff. April 1, 2014; August 1, 2002; July 1, 1994.*

1 15A NCAC 18C .1520 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .1520 MAXIMUM CONTAMINANT LEVELS FOR RADIONUCLIDES**

4 The provisions of 40 C.F.R. 141.66 are hereby incorporated by reference including any subsequent amendments and  
5 editions. ~~This material is available for inspection at the Department of Environment and Natural Resources,  
6 Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from  
7 the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-426-4791 or from EPA's  
8 homepage at <http://www.epa.gov/OGWDW/>.~~ Copies are available for public inspection as set forth in Rule 18C  
9 .0102 of this Subchapter.

10

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

12 *Eff. September 1, 1979;*

13 *Transferred and Recodified from 10 NCAC 10D .1617 Eff. April 4, 1990;*

14 *Amended Eff. April 1, 2014; August 1, 2002; July 1, 1994.*

1 15A NCAC 18C .1521 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .1521 MAXIMUM CONTAMINANT LEVEL GOALS FOR RADIONUCLIDES**

4 The provisions of 40 C.F.R. 141.55 are hereby incorporated by reference including any subsequent amendments and  
5 editions. ~~This material is available for inspection at the Department of Environment and Natural Resources,  
6 Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from  
7 the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-426-4791 or from EPA's  
8 homepage at <http://www.epa.gov/OGWDW/>.~~ Copies are available for public inspection as set forth in Rule 18C  
9 .0102 of this Subchapter.

10

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

12 *Eff. September 1, 1979;*

13 *Transferred and Recodified from 10 NCAC 10D .1618 Eff. April 4, 1990;*

14 *Amended Eff. April 1, 2014; August 1, 2002; July 1, 1994.*

1 15A NCAC 18C .1522 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .1522 ANALYTICAL METHODS FOR RADIOACTIVITY**

4 The provisions of 40 C.F.R. 141.25 are hereby incorporated by reference including any subsequent amendments and  
5 editions. ~~This material is available for inspection at the Department of Environment and Natural Resources,~~  
6 ~~Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from~~  
7 ~~the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-426-4791 or from EPA's~~  
8 ~~homepage at <http://www.epa.gov/OGWDW/>.~~ Copies are available for public inspection as set forth in Rule 18C  
9 .0102 of this Subchapter.

10

11 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;*  
12 *Eff. September 1, 1979;*  
13 *Amended Eff. March 31, 1981; March 31, 1980;*  
14 *Transferred and Recodified from 10 NCAC 10D .1626 Eff. April 4, 1990;*  
15 *Amended Eff. April 1, 2014; August 1, 2002; September 1, 1990.*

1 15A NCAC 18C .1523 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .1523 PUBLIC NOTIFICATION REQUIREMENTS**

4 (a) The provisions of 40 C.F.R. 141.32 are hereby incorporated by reference including any subsequent amendments  
5 and editions, except that multi-lingual notice shall be given if 30 percent or more of the consumers served by the  
6 system are non-English speaking. ~~This material is available for inspection at the Department of Environment and  
7 Natural Resources, Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies  
8 may be obtained from the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-426-4791  
9 or from EPA's homepage at <http://www.epa.gov/OGWDW/>.~~ Copies are available for public inspection as set forth in  
10 Rule 18C .0102 of this Subchapter.

11 (b) The provisions of 40 C.F.R. 141, Subpart Q – Public Notification of Drinking Water Violations are hereby  
12 incorporated by reference including any subsequent amendments and editions. ~~This material is available for  
13 inspection at the Department of Environment and Natural Resources, Division of Environmental Health, 2728  
14 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from the Environmental Protection Agency's  
15 (USEPA) Drinking Water Hotline at 1-800-426-4791 or from EPA's homepage  
16 at <http://www.epa.gov/OGWDW/>.~~ Copies are available for public inspection as set forth in Rule 18C .0102 of this  
17 Subchapter.

18 (c) Special notification for distribution system samples. The requirements of this Paragraph shall be additional to  
19 the public notice requirements in Paragraphs (a) and (b) of this Rule and to the reporting requirements contained in  
20 Rule .1525 of this Subchapter. When a distribution sample is taken on property not owned or controlled by the  
21 supplier of water, the supplier of water shall notify the person authorizing the sample if any individual water sample  
22 exceeds an action level, ~~MCL or MRDL~~ maximum contaminant level, or maximum residual disinfectant level  
23 established in this Subchapter, or if any individual sample is positive for coliform bacteria. The supplier of water  
24 shall give notice to the person authorizing the sample in a format provided by the Department, as follows:

25 (1) For a contaminant listed as Tier 1 in Appendix A to 40 C.F.R. 141, Subpart Q, notice shall be  
26 provided ~~by telephone~~ by telephone within 24 hours of receipt of analytical results and shall be  
27 followed by written notice by mail or direct delivery within 48 hours of receipt. The written  
28 notice shall include the analytical results and appropriate health effects language.

29 (2) For a contaminant listed as Tier 2 or Tier 3 in Appendix A to 40 C.F.R. 141, Subpart Q, notice  
30 shall be provided within 48 hours of receipt of analytical results. Written notice shall be provided  
31 by mail or direct delivery to the person authorizing the sample and shall include the analytical  
32 results and appropriate health effects language.

33 (3) The supplier of water shall submit a copy of the written notice and certification of delivery to the  
34 Department within 10 days of completing notification.

35 The person authorizing the sample may waive the notification required by this Paragraph. The waiver shall be  
36 documented in writing and signed by the authorizing person. The waiver is valid for five years and is renewable.

37

1 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;*  
2 *Eff. January 1, 1990;*  
3 *Transferred and Recodified from 10 NCAC 10D .1642 Eff. April 4, 1990;*  
4 *Amended Eff. April 1, 2014; October 1, 2006; August 1, 2002; April 1, 1992; December 1, 1991;*  
5 *January 1, 1991; October 1, 1990.*



1 15A NCAC 18C .1525 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2  
3 **15A NCAC 18C .1525 REPORTING REQUIREMENTS**

4 (a) The requirements of this Rule shall apply to all public water systems. The provisions of 40 C.F.R. 141.31 are  
5 hereby incorporated by reference including any subsequent amendments and editions. ~~This material is available for~~  
6 ~~inspection at the Department of Environment and Natural Resources, Division of Environmental Health, 2728~~  
7 ~~Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from the Environmental Protection Agency's~~  
8 ~~(USEPA) Drinking Water Hotline at 1 800 426 4791 or from EPA's homepage at~~  
9 ~~<http://www.epa.gov/OGWDW/>.~~ Copies are available for public inspection as set forth in Rule 18C .0102 of this  
10 Subchapter. Any dates set forth in the federal rule shall be applicable.

11 (b) When a certified laboratory analyzes a compliance sample for a supplier of water, the certified laboratory shall  
12 report the results to both the Department and to the supplier of water or his designated representative within the  
13 required periods as set forth in 40 C.F.R. 141.31. The laboratory reporting to the State Department shall include  
14 analytical results for any MCL maximum contaminant level exceedence within the timeframes applicable to the  
15 system owner. Reporting shall be in a format, to include electronic reporting, provided by the Department and  
16 shall ~~contain all required information.~~ be filled out completely. Should a certified laboratory fail to properly report a  
17 compliance sample result, it shall be the responsibility of the supplier of water to report results to the Department as  
18 required by this Rule.

19  
20 *History Note: Authority G.S. 130A-315; 40 C.F.R 141;*  
21 *Eff. September 1, 1979;*  
22 *Amended Eff. February 1, 1987; October 1, 1984; March 31, 1981; March 31, 1980;*  
23 *Transferred and Recodified from 10 NCAC 10D .1631 Eff. April 4, 1990;*  
24 *Amended Eff. April 1, 2014; August 1, 2002; January 1, 1991.*

1 15A NCAC 18C .1526 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .1526 RECORD MAINTENANCE**

4 The provisions of 40 C.F.R. 141.33 are hereby incorporated by reference including any subsequent amendments and  
5 editions. ~~This material is available for inspection at the Department of Environment and Natural Resources,  
6 Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from  
7 the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-426-4791 or from EPA's  
8 homepage at <http://www.epa.gov/OGWDW/>. Copies are available for public inspection as set forth in Rule 18C  
9 .0102 of this Subchapter.~~

10

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

12 *Eff. September 1, 1979;*

13 *Transferred and Recodified from 10 NCAC 10D .1632 Eff. April 4, 1990;*

14 *Amended Eff. April 1, 2014; August 1, 2002.*

1 15A NCAC 18C .1534 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2  
3 **15A NCAC 18C .1534 COLIFORM SAMPLING**

4 (a) The provisions of 40 C.F.R. 141.21 are hereby incorporated by reference including any subsequent amendments  
5 and editions. ~~This material is available for inspection at the Department of Environment, Health, and Natural~~  
6 ~~Resources, Division of Environmental Health, 1330 Saint Mary's Street, Raleigh, North Carolina. Non members~~  
7 ~~may obtain copies from the American Water Works Association, Information Services, 666 West Quincy Avenue,~~  
8 ~~Denver, Colorado 80235 at a cost of fifteen dollars (\$15.00) up to 20 pages and thirty cents (\$0.30) per page for~~  
9 ~~each additional page. Copies are available for public inspection as set forth in Rule 18C .0102 of this Subchapter.~~

10 The provisions are incorporated with the following exceptions:

- 11 (1) ~~The~~ the provision of 40 C.F.R. 141.21(a)(2) concerning the reduction of monitoring frequency for  
12 community water systems serving 25 to 1,000 persons is not adopted;
- 13 (2) ~~The~~ the provision of 40 C.F.R. 141.21(b)(3) concerning collection of large volume repeat samples  
14 in containers of any size is not adopted; and
- 15 (3) ~~The~~ the provision of 40 C.F.R. 141.21(c)(2) concerning waiver of the 24-hour limit for  
16 re-sampling is not adopted.

17 (b) An adjacent water system shall submit samples monthly from each section of the water system supplied from a  
18 separate source. The minimum number of samples each month per section is based on the population served by the  
19 section and shall be determined by the table in 40 C.F.R. 141.21(a)(2).

20  
21 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141.21;*  
22 *Eff. January 1, 1991;*  
23 *Amended Eff. April 1, 2014; February 1, 1992.*

1 15A NCAC 18C .1536 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .1536 TREATMENT TECHNIQUES**

4 The provisions of 40 C.F.R. 141. Subpart K are hereby incorporated by reference including any subsequent  
5 amendments and editions. ~~This material is available for inspection at the Department of Environment, Health, and~~  
6 ~~Natural Resources, Division of Environmental Health, 1330 Saint Mary's Street, Raleigh, North Carolina.~~  
7 ~~Non members may obtain copies from the American Water Works Association, Information Services, 6666 West~~  
8 ~~Quincy Avenue, Denver, Colorado 80235 at a cost of fifteen dollars (\$15.00) up to 20 pages and thirty cents (\$0.30)~~  
9 ~~per page for each additional page. Copies are available for public inspection as set forth in Rule 18C .0102 of this~~  
10 Subchapter.

11

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

13 *Eff. April 1, ~~1992~~1992;*

14 *Amended Eff. April 1, 2014.*

1 15A NCAC 18C .1537 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2  
3 **15A NCAC 18C .1537 DRINKING WATER ADDITIVES**

4 (a) The standards set forth in American National Standards Institute/NSF International, codified at ANSI/NSF  
5 Standard 60 and ANSI/NSF Standard 61, are hereby incorporated by reference including any subsequent  
6 amendments and editions. ~~This material is available for inspection at the Department of Environment, Health, and  
7 Natural Resources, Division of Environmental Health, 1330 Saint Mary's Street, Raleigh, North Carolina. Copies of  
8 ANSI/NSF 60: Drinking Water Treatment Chemicals—Health Effects or ANSI/NSF 61: Drinking Water System  
9 Components—Health Effects may be obtained at a cost of forty five dollars (\$45.00) each from NSF International  
10 from their web site., P. O. Box 130140, Ann Arbor, Michigan 48113-0140. Copies are available for public  
11 inspection as set forth in Rule 18C .0102 of this Subchapter.~~

12 (b) A water supply product used in a public water system shall meet the standards incorporated by reference in  
13 Paragraph (a) of this Rule. A product certified by an organization having a third-party certification program  
14 accredited by the American National Standards Institute to test and certify such products is acceptable for use in a  
15 public water system.

16 (c) A supplier of water shall maintain a list of all water supply products used in a public water system for inspection  
17 by the Department. Prior to using a product not previously listed, a supplier of water shall either determine the  
18 product is certified as required by Paragraph (b) of this Rule or notify the Department of the type, name and  
19 manufacturer of a product.

20 (d) A supplier of water shall not ~~willfully~~ introduce or permit the introduction of a water supply product into a  
21 public water system which does not meet the requirements of this Rule.

22  
23 *History Note: Authority G.S. ~~103A-315; 130A-315~~; P.L. 93-523;*  
24 *Eff. July 1, ~~1994~~, 1994;*  
25 *Amended Eff. April 1, 2014.*

1 15A NCAC 18C .1538 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .1538 CONSUMER CONFIDENCE REPORT**

4 (a) The provisions of 40 C.F.R. 141, Subpart O - Consumer Confidence Reports are hereby incorporated by  
5 reference including any subsequent amendments and editions. ~~This material is available for inspection at the~~  
6 ~~Department of Environment and Natural Resources, Division of Environmental Health, 2728 Capital Boulevard,~~  
7 ~~Raleigh, North Carolina. Copies may be obtain from the Environmental Protection Agency's (USEPA) Drinking~~  
8 ~~Water Hotline at 1 800 426 4791 or from EPA's Consumer Confidence Report Rule homepage~~  
9 ~~at <http://www.epa.gov/safewater/ccr1.html>.~~ Copies are available for public inspection as set forth in Rule 18C .0102  
10 of this Subchapter.

11 (b) Travel trailer parks, campgrounds, and marina slips that are community water systems as defined by G.S. 130A-  
12 313(10), but do not serve 25 or more of the same persons more than six months per year shall be exempt from the  
13 provisions of this Rule.

14

15 *History Note: Authority G.S. 130A-313; G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;*

16 *Eff. August 1, ~~2000~~2000;*

17 *Amended Eff. April 1, 2014.*

1 15A NCAC 18C .1605 is amended pursuant to G.S. 150B-21.5(a)(2) as follows:

2  
3 **15A NCAC 18C .1605 PUBLIC HEARINGS ON VARIANCES AND SCHEDULES**

4 (a) Before a variance or a schedule proposed by the Secretary pursuant to Rule .1604 of this Section may take  
5 effect, the Secretary shall provide notice and opportunity for public hearing on the variance or schedule. Such  
6 notice may cover the granting of more than one variance, and a hearing held pursuant to such notice shall include  
7 each of the variances covered by that notice.

8 (b) Public notice of an opportunity for hearing on a variance or schedule shall be circulated in a manner designed to  
9 inform interested and potentially interested persons of the proposed variance or schedule and shall include ~~at least~~  
10 ~~the following:~~ the following minimum requirements:

11 (1) ~~Posting~~ posting of a notice in the principal post office of each municipality or area served by the  
12 public water system, and publishing of a notice in a newspaper or newspapers of general  
13 circulation in the area served by the public water system; ~~and~~

14 (2) ~~Mailing~~ mailing of a notice to the Public Water Supply Section, Division of ~~Environmental~~  
15 ~~Health-Water Resources~~ and to other appropriate state or local agencies at the Department's  
16 discretion; and

17 (3) ~~Such~~ such notice shall include a summary of the proposed variance or schedule and shall inform  
18 interested persons that they may request a public hearing on the proposed variance or schedule.

19 (c) Requests for hearing may be submitted by any interested person. Frivolous or insubstantial requests for hearing  
20 may be denied by the Secretary. Requests ~~must~~ shall be submitted to the Secretary within 30 days after issuance of  
21 the public notice provided for in Paragraph (b) of this Rule. Such requests shall include the following information:

22 (1) the name, address and telephone number of the individual, organization or other entity requesting  
23 a hearing;

24 (2) a brief statement of the interest of the ~~person~~ individual, organization or other entity making the  
25 request in the proposed variance or schedule and of information that the ~~requesting~~  
26 ~~person~~ requestor intends to submit at such hearing; and

27 (3) the signature of the individual making the request or if the request is made on behalf of an  
28 organization or other entity, the signature of a responsible official of the organization or other  
29 entity.

30 (d) Any hearing held pursuant to a request submitted by an ~~interested person~~ individual, organization or other  
31 entity or on the Secretary's own motion shall be conducted in the manner set forth in G.S. 150B-22 through  
32 150B-37.

33  
34 *History Note:* Authority G.S. 130A-315; 130A-321; P.L. 93-523; 40 C.F.R. 142;  
35 Eff. September 1, 1979;  
36 Transferred and Recodified from 10 NCAC 10D .2505 Eff. April 4, 1990;  
37 Amended Eff. April 1, 2014; September 1, 1991.

1 15A NCAC 18C .1607 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .1607 VARIANCES AND EXEMPTIONS FOR CHEMICALS, LEAD AND COPPER,**  
4 **AND RADIONUCLIDES**

5 (a) The provisions of 40 C.F.R. 142.62 are hereby incorporated by reference including any subsequent amendments  
6 and editions. ~~This material is available for inspection at the Department of Environment and Natural Resources,~~  
7 ~~Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from~~  
8 ~~the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1 800 426 4791 or from EPA's~~  
9 ~~homepage at <http://www.epa.gov/OGWDW/>.~~ Copies are available for public inspection as set forth in Rule 18C  
10 .0102 of this Subchapter.

11 (b) The provisions of 40 C.F.R. 142.65 are hereby incorporated by reference including any subsequent amendments  
12 and editions. ~~This material is available for inspection at the Department of Environment and Natural Resources,~~  
13 ~~Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from~~  
14 ~~the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1 800 426 4791 or from EPA's~~  
15 ~~homepage at <http://www.epa.gov/OGWDW/>.~~ Copies are available for public inspection as set forth in Rule 18C  
16 .0102 of this Subchapter.

17

18 *History Note:* Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 142;  
19 Eff. June 1, 1988;  
20 Transferred and Recodified from 10 NCAC 10D .2514 Eff. April 4, 1990;  
21 Amended Eff. April 1, 2014; August 1, 2002; October 1, 1992.



1 15A NCAC 18C .1612 is amended pursuant to G.S. 150B-21.5(a)(2) as follows:

2  
3 **15A NCAC 18C .1612 PUBLIC HEARINGS ON EXEMPTION SCHEDULES**

4 (a) Before a schedule proposed by the Secretary pursuant to Rule .1611 of this Section may take effect, the  
5 Secretary shall provide notice and opportunity for public hearing on the schedule. Such notice may cover the  
6 proposal of more than one such schedule and a hearing held pursuant to such notice shall include each of the  
7 schedules covered by the notice.

8 (b) Public notice of an opportunity for hearing on an exemption schedule shall be circulated in a manner designed to  
9 inform interested and potentially interested persons of the proposed schedule, and shall include ~~at least the~~  
10 ~~following:~~ the following minimum requirements:

11 (1) ~~Posting~~ posting of a notice in the principal post office of each municipality or area served by the  
12 public water system, and publishing a notice in the newspaper or newspapers of general  
13 circulation in the area served by the public water system;

14 (2) ~~Mailing~~ mailing of a notice to the Public Water Supply Section, Division of ~~Environmental~~  
15 ~~Health-Water Resources~~ and to other appropriate state or local agencies at the Secretary's  
16 discretion; and

17 (3) ~~Such~~ such notices shall include a summary of the proposed schedule and shall inform interested  
18 persons that they may request a public hearing on the proposed schedule.

19 (c) Requests for hearing may be submitted by any interested person. Frivolous or insubstantial requests for hearing  
20 may be denied by the Secretary. Requests ~~must~~ shall be submitted to the Secretary within 30 days after issuance of  
21 the public notices provided for in Paragraph (b) of this Rule. Such requests shall include the following information:

22 (1) the name, address and telephone number of the individual, organization or other entity requesting  
23 a hearing;

24 (2) a brief statement of the interest of the ~~person~~ individual, organization or other entity making the  
25 request in the proposed schedule and of information that the ~~requesting person~~ requestor intends to  
26 submit at such hearing; and

27 (3) the signature of the individual making the request, or, if the request is made on behalf of an  
28 organization or other entity, the signature of a responsible official of the organization or other  
29 entity.

30 (d) Any hearing held pursuant to a request submitted by an ~~interested person~~ individual, organization or other entity  
31 or on the Secretary's own motion shall be conducted in the manner set forth in G.S. 150B-22 through 150B-37.

32  
33 *History Note:* Authority G.S. 130A-315; 130A-321; P.L. 93-523; 40 C.F.R. 142;  
34 Eff. September 1, 1979;  
35 Transferred and Recodified from 10 NCAC 10D .2510 Eff. April 4, 1990;  
36 Amended Eff. April 1, 2014; December 1, 1991.

1 15A NCAC 18C .1701 is repealed pursuant to G.S. 150B-21.5(b)(1) as follows:

2

3 **15A NCAC 18C .1701 PURPOSE**

4

5 *History Note: Authority S.L. 1971, Ch. 909, as amended by S.L. 1973, Ch. 232;*

6 *S.L. 1977, Ch. 677;*

7 *Eff. June 30, ~~1978~~, 1978;*

8 *Repealed Eff. April 1, 2014.*

1 15A NCAC 18C .1702 is repealed pursuant to G.S. 150B-21.5(b)(1) as follows:

2

3 **15A NCAC 18C .1702 GRANT COMMITMENTS FROM CURRENT ALLOCATION**

4

5 *History Note: Authority S.L. 1977, Ch. 677;*

6 *Eff. June 30, ~~1978~~1978;*

7 *Repealed Eff. April 1, 2014.*

1 15A NCAC 18C .1703 is repealed pursuant to G.S. 150B-21.5(b)(1) as follows:

2

3 **15A NCAC 18C .1703 COUNTY ALLOCATIONS COMMITTED BEFORE STATEWIDE**  
4 **ALLOCATION**

5

6 *History Note: Authority S.L. 1977, Ch. 677;*

7 *Eff. June 30, ~~1978~~1978;*

8 *Repealed Eff. April 1, 2014.*

1 15A NCAC 18C .1704 is repealed pursuant to G.S. 150B-21.5(b)(1) as follows:

2

3 **15A NCAC 18C .1704 REFERENCE RULE**

4

5 *History Note:* Authority G.S. S.L. 1971, Ch. 909, as amended by S.L. 1973, Ch. 232;

6 S.L. 1977, Ch. 677;

7 Eff. June 30, ~~1978-1978~~;

8 Repealed Eff. April 1, 2014.

1 15A NCAC 18C .1906 is amended pursuant to G.S. 150B-21.5(a)(2) as follows:

2  
3 **15A NCAC 18C .1906 CONSIDERATIONS IN ASSESSING ADMINISTRATIVE PENALTIES**

4 In determining the amount of the assessment, the Department or its delegates shall consider the following criteria  
5 and shall cite ~~which provisions~~ the provisions that are applicable:

6 (1) nature of the violation and the degree and extent of the harm, including ~~but not limited to~~ the  
7 following:

8 (a) for a violation of the North Carolina Drinking Water Act, Article 10 of Chapter 130A,  
9 and the ~~rules adopted thereunder~~: Rules in this Subchapter:

10 (i) type of violation,

11 (ii) type of contaminant involved,

12 (iii) duration,

13 (iv) cause (whether resulting from a negligent, reckless or intentional ~~act~~ act, or  
14 omission),

15 (v) potential effect on public health and the environment,

16 (vi) effectiveness of responsive measures taken by the violator,

17 (vii) damage to private property, and

18 (viii) size of the water system and population exposed;

19 (b) for a violation of an order issued under the North Carolina Drinking Water Act, Article  
20 10 of Chapter 130A:

21 (i) subject matter of ~~order~~; order,

22 (ii) ~~duration~~; duration,

23 (iii) cause (whether resulting from a negligent, reckless or intentional ~~act~~ act,  
24 or ~~omission~~); omission),

25 (iv) type of violation, if ~~any~~; any,

26 (v) potential effect on public health and the ~~environment~~; environment, and

27 (vi) effectiveness of responsive measures taken by violator;

28 (c) for refusing to allow an authorized representative of the Commission for Public Health,  
29 any local board of health, or the Department of ~~Environment, Health, and Natural~~  
30 ~~Resources~~ a right of entry as provided for in G.S. 130A-17:

31 (i) type of other violation, if any,

32 (ii) duration of refusal, and

33 (iii) potential effect on public health and the environment;

34 (d) for failure to give adequate public notice as required by G.S. 130A-324:

35 (i) inadequacy of type of notice,

36 (ii) misleading in nature,

37 (iii) delay in providing notice, and

- 1 (iv) potential effect on public health from failure to give adequate notice;  
2 (2) cost of rectifying any damage; and  
3 (3) the violator's previous record in complying or not complying with the North Carolina Drinking  
4 Water Act, Article 10 of Chapter 130A and the ~~regulations adopted thereunder.~~ Rules in this  
5 Subchapter.  
6

7 *History Note:* *Authority G.S. 130A-22(f); G.S. 130A-17; G.S. 130A-324;*  
8 *Eff. September 1, 1979;*  
9 *Amended Eff. April 1, 2014; October 1, 1984.*

1 15A NCAC 18C .2002 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .2002 DISINFECTION**

4 The provisions of 40 C.F.R. 141.72 are hereby adopted by reference in accordance with G.S. 150B-21.6 including  
5 subsequent amendments and editions. ~~This material is available for inspection at the Department of Environment  
6 and Natural Resources, Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies  
7 are available for public inspection as set forth in Rule 18C .0102 of this Subchapter.~~ These provisions are adopted  
8 with the following exceptions:

- 9 (1) Water entering the distribution system. In 40 C.F.R. 141.72 (a)(2), ~~(a)(3)~~ (a)(3), and (b)(2), "0.2  
10 mg/l" of residual disinfectant concentration shall be replaced with "0.2 mg/l measured as free  
11 chlorine when chlorine is the singular applied disinfectant and 1.0 mg/l measured as total chlorine  
12 when ammonia and chlorine are applied ~~disinfectants".~~ disinfectants."
- 13 (2) Water in the distribution system at ~~Coliform Sampling Sites.~~ coliform sampling sites. In 40  
14 C.F.R. 141.72(a)(4) and (b)(3), "undetectable" shall be replaced with "less than 0.2 mg/l measured  
15 as free chlorine when chlorine is the singular applied disinfectant and less than 1.0 mg/l measured  
16 as total chlorine when ammonia and chlorine are applied ~~disinfectants".~~ disinfectants."
- 17 (3) Water in the distribution system at ~~Maximum Residence Time Sites.~~ maximum residence time  
18 sites. For samples collected at maximum residence time sites or at other locations with high water  
19 age as required by ~~15A NCAC 18C .1302(a)(2),~~ Rule 18C .1302(a)(2) of this Subchapter, residual  
20 disinfectant concentrations shall be at detectable levels as set forth and calculated in 40 C.F.R.  
21 141.72(a)(4) and (b)(3).

22

23 *History Note:* Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141.72;

24 Eff. January 1, 1991;

25 Amended Eff. April 1, 2014; October 1, 2009.



1 15A NCAC 18C .2003 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .2003 FILTER BACKWASH RECYCLING RULE**

4 (a) The requirements of this Rule shall apply to a public water system that uses a surface water source or a  
5 groundwater source under the direct influence of surface water. The provisions of 40 C.F.R. 141.73 are hereby  
6 incorporated by reference including any subsequent amendments and editions. ~~This material is available for  
7 inspection at the Department of Environment and Natural Resources, Division of Environmental Health, 2728  
8 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from the Environmental Protection Agency's  
9 (USEPA) Drinking Water Hotline at 1 800 426 4791 or from EPA's homepage at  
10 <http://www.epa.gov/OGWDW/>. Copies are available for public inspection as set forth in Rule 18C .0102 of this  
11 Subchapter.~~ Any dates set forth in the federal rule shall be applicable.

12 (b) The requirements of this Rule shall apply to a public water system that uses a surface water source or a  
13 groundwater source under the direct influence of surface ~~water,~~ water; uses direct or conventional  
14 filtration ~~processes~~ processes; and recycles spent filter backwash water, sludge thickener supernatant, or liquids  
15 from dewatering processes. The provisions of 40 C.F.R. 141.76 are hereby incorporated by reference including any  
16 subsequent amendments and editions. ~~This material is available for inspection at the Department of Environment  
17 and Natural Resources, Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina.  
18 Copies may be obtained from the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1 800-  
19 426 4791 or from EPA's homepage at <http://www.epa.gov/OGWDW/>. Copies are available for public inspection as  
20 set forth in Rule 18C .0102 of this Subchapter.~~ Any dates set forth in the federal rule shall be applicable.

21

22 *History Note:* Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141.73; 40 C.F.R. 141.76;

23 Eff. January 1, 1991;

24 Amended Eff. April 1, 2014; August 1, 2002.

1 15A NCAC 18C .2004 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .2004 ANALYTICAL AND MONITORING REQUIREMENTS**

4 The provisions of 40 C.F.R. 141.74 are hereby adopted by reference in accordance with G.S. 150B-21.6 including  
5 subsequent amendments and editions. ~~This material is available for inspection at the Department of Environment  
6 and Natural Resources, Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies  
7 are available for public inspection as set forth in Rule 18C .0102 of this Subchapter.~~ These provisions are adopted  
8 with the following exceptions:

9 (1) The residual disinfectant concentration of the water entering the distribution system shall be  
10 monitored continuously, and the lowest value shall be recorded each day, except that if there is a  
11 failure in the continuous monitoring equipment, grab sampling every four hours may be conducted  
12 in lieu of continuously monitoring, but for no more than five working days following the failure of  
13 the equipment. Systems serving 3,300 or fewer persons may take grab samples in lieu of  
14 providing continuous monitoring on an ongoing basis at the frequency of every four hours that  
15 water is being treated.

16 (2) In 40 C.F.R. 141.74, "0.2 mg/l" of residual disinfectant concentration shall be replaced with "0.2  
17 mg/l measured as free chlorine when chlorine is the singular applied disinfectant and 1.0 mg/l  
18 measured as total chlorine when ammonia and chlorine are applied ~~disinfectants".~~ disinfectants."

19

20 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141.74;*

21 *Eff. January 1, 1991;*

22 *Amended Eff. April 1, 2014; October 1, 2009.*

1 15A NCAC 18C .2006 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .2006 REPORTING AND RECORD KEEPING REQUIREMENTS**

4 The provisions of 40 C.F.R. 141.75 are hereby adopted by reference in accordance with G.S. 150B-21.6 including  
5 subsequent amendments and editions. ~~This material is available for inspection at the Department of Environment  
6 and Natural Resources, Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies  
7 are available for public inspection as set forth in Rule 18C .0102 of this Subchapter.~~ These provisions are adopted  
8 with the following exception: In 40 C.F.R. 141.75, "0.2 mg/l" of residual disinfectant concentration shall be  
9 replaced with "0.2 mg/l measured as free chlorine when chlorine is the singular applied disinfectant and 1.0 mg/l  
10 measured as total chlorine when ammonia and chlorine are applied ~~disinfectants".~~ disinfectants."

11

12 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141.75;*

13 *Eff. January 1, 1991;*

14 *Amended Eff. April 1, 2014; October 1, 2009.*

1 15A NCAC 18C .2007 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .2007 ENHANCED FILTRATION AND DISINFECTION**

4 (a) Public water systems shall respond to the ~~State~~ Department in writing to significant deficiencies outlined in  
5 sanitary survey reports no later than 45 days after receipt of the report, indicating how and on what schedule the  
6 system will address significant deficiencies noted in the survey.

7 (b) Public water systems shall take necessary steps to address significant deficiencies identified in sanitary survey  
8 reports if such deficiencies are within the control of the public water system and its governing body.

9 (c) Sanitary survey means an onsite review by the ~~State~~ Department of the water source (identifying sources of  
10 contamination using results of source water assessments where available), facilities, equipment, operation,  
11 maintenance, and monitoring compliance of a public water system to evaluate the adequacy of the system, its  
12 sources and operations and the distribution of safe drinking water.

13 (d) ~~A significant~~ Significant deficiency ~~is~~ means a defect in a system's design, operation, or maintenance, as well as  
14 any failures or malfunctions of its treatment, storage, or distribution system, that is causing or has the potential to  
15 cause the introduction of contamination into water delivered to customers.

16 (e) When a public water system is required to conduct a comprehensive performance evaluation (CPE) pursuant to  
17 this Subchapter, the CPE shall include: ~~assessment of water treatment plant performance, evaluation of major unit~~  
18 ~~processes, identification and prioritization of performance limiting factors, assessment of the applicability of~~  
19 ~~comprehensive technical assistance, and a written CPE report.~~

- 20 (1) assessment of water treatment plant performance;
- 21 (2) evaluation of major unit processes;
- 22 (3) identification and prioritization of performance limiting factors;
- 23 (4) assessment of the applicability of comprehensive technical assistance; and
- 24 (5) a written CPE report.

25 The public water system shall participate in a comprehensive technical assistance (CTA) activity when the  
26 Department determines, based on the CPE results, there is a potential for improved water treatment performance and  
27 the public water system is able to receive and implement technical assistance. During the CTA phase, the public  
28 water system shall use the CPE results to identify and systematically address factors limiting performance of its  
29 water treatment plant; further, the public water system shall implement process control priority-setting techniques,  
30 and maintain long-term involvement in training staff and administrators.

31 (f) The provisions of 40 C.F.R. 141, Subpart P - Enhanced Filtration and Disinfection - (Systems Serving 10,000 or  
32 More ~~People~~ People), and Subpart T - Enhanced Filtration and Disinfection - (Systems Serving Fewer than 10,000  
33 People) and the provisions of 40 C.F.R. 141, Subpart W- Enhanced Treatment for *Cryptosporidium* are hereby  
34 incorporated by reference including any subsequent amendments and editions. ~~This material is available for~~  
35 ~~inspection at the Department of Environment and Natural Resources, Division of Environmental Health, 2728~~  
36 ~~Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from the Environmental Protection Agency's~~  
37 ~~(USEPA) Drinking Water Hotline at 1 800 426 4791 or from EPA's webpage at~~

1 ~~<http://www.epa.gov/ogwdw/regs.html>~~. Copies are available for public inspection as set forth in Rule 18C .0102 of  
2 this Subchapter.

3

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

5 *Eff. August 1, 2000;*

6 *Amended Eff. April 1, 2014; October 1, 2009; November 1, 2005.*

1 15A NCAC 18C .2008 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .2008 DISINFECTANTS AND DISINFECTION BYPRODUCTS**

4 (a) The provisions of 40 C.F.R. 141.53 are hereby incorporated by reference including any subsequent amendments  
5 and editions. ~~This material is available for inspection at the Department of Environment and Natural Resources,~~  
6 ~~Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from~~  
7 ~~the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-426-4791 or from EPA's~~  
8 ~~webpage at <http://www.epa.gov/ogwdw/regs.html>. Copies are available for public inspection as set forth in Rule~~  
9 18C .0102 of this Subchapter.

10 (b) The provisions of 40 C.F.R. 141.54 are hereby incorporated by reference including any subsequent amendments  
11 and editions. ~~This material is available for inspection at the Department of Environment and Natural Resources,~~  
12 ~~Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from~~  
13 ~~the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-426-4791 or from EPA's~~  
14 ~~webpage at <http://www.epa.gov/ogwdw/regs.html>. Copies are available for public inspection as set forth in Rule~~  
15 18C .0102 of this Subchapter.

16 (c) The provisions of 40 C.F.R. 141.64 are hereby incorporated by reference including any subsequent amendments  
17 and editions. ~~This material is available for inspection at the Department of Environment and Natural Resources,~~  
18 ~~Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from~~  
19 ~~the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-426-4791 or from EPA's~~  
20 ~~webpage at <http://www.epa.gov/ogwdw/regs.html>. Copies are available for public inspection as set forth in Rule~~  
21 18C .0102 of this Subchapter.

22 (d) The provisions of 40 C.F.R. 141.65 are hereby incorporated by reference including any subsequent amendments  
23 and editions. ~~This material is available for inspection at the Department of Environment and Natural Resources,~~  
24 ~~Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North Carolina. Copies may be obtained from~~  
25 ~~the Environmental Protection Agency's (USEPA) Drinking Water Hotline at 1-800-426-4791 or from EPA's~~  
26 ~~webpage at <http://www.epa.gov/ogwdw/regs.html>. Copies are available for public inspection as set forth in Rule~~  
27 18C .0102 of this Subchapter.

28 (e) The provisions of 40 C.F.R. 141, Subpart L- Disinfectant Residuals, Disinfection Byproducts, and Disinfection  
29 Byproduct ~~Precursors~~ Precursors, and the provisions of 40 C.F.R. 141, Subparts U-Initial Distribution System  
30 Evaluations and Subpart V - Stage 2 Disinfection Byproducts Requirements are hereby incorporated by reference  
31 including any subsequent amendments and editions. ~~This material is available for inspection at the Department of~~  
32 ~~Environment and Natural Resources, Division of Environmental Health, 2728 Capital Boulevard, Raleigh, North~~  
33 ~~Carolina. Copies may be obtained from the Environmental Protection Agency's (USEPA) Drinking Water Hotline~~  
34 ~~at 1-800-426-4791 or from EPA's webpage at <http://www.epa.gov/ogwdw/regs.html>. Copies are available for public~~  
35 inspection as set forth in Rule 18C .0102 of this Subchapter.

1 (f) Travel trailer parks, campgrounds, and marina slips that are community water systems as defined by G.S. 130A-  
2 313(10), but do not serve 25 or more of the same persons more than six months per year shall be regulated as  
3 transient non-community water systems for the purpose of this Rule.

4

5 *History Note: Authority G.S. 130A-313; G.S. 130A-315; P.L. 93-525; 40 C.F.R. 141;*  
6 *Eff. August 1, 2000;*  
7 *Amended Eff. April 1, 2014; October 1, 2009; August 1, 2002.*

1 15A NCAC 18C .2102 is amended pursuant to G.S. 150B-21.5(a)(2) as follows:

2  
3 **15A NCAC 18C .2102 APPLICATION FOR PERMIT**

4 (a) An application for the issuance or renewal of an operating permit for a community water system shall be made  
5 on forms provided by the Department. An application shall include the following information:

- 6 (1) ~~Name~~ name and identification number of the community water system;  
7 (2) ~~Name, address~~ name, address, and social security number or tax identification number of the  
8 supplier of water;  
9 (3) ~~Name, address~~ name, address, and certification number of the certified operator in responsible  
10 charge of the community water system;  
11 (4) ~~Name~~ name of each certified laboratory which provides analyses of water samples; and  
12 (5) ~~Population~~ population served by the community water system.

13 (b) The fee for issuance or renewal of an operating permit is set forth in G.S. 130A-328.

14 (c) Payment shall be made by check, payable to the Department of ~~Environment, Health,~~ Environment and Natural  
15 Resources and shall accompany the application.

16 (d) Applications for operating permits shall not be processed prior to the receipt of the required fees.

17 (e) An operating permit shall be renewed annually.

18 (f) The supplier of water who holds a current operating permit shall inform the Department of any change of  
19 address or transfer of ownership within 30 days of the change.

20  
21 *History Note: Filed as a Temporary Adoption Eff. January 22, 1992 for a Period of 180 Days to Expire on July*  
22 *19, 1992;*

23 *Authority G.S. 130A-328;*

24 *Eff. April 1, 1992;*

25 *Amended Eff. April 1, 2014; July 1, 1993.*



1 15A NCAC 18C .2202 is amended pursuant to G.S. 150B-21.5(a)(2)&(4) as follows:

2

3 **15A NCAC 18C .2202 GROUND WATER RULE**

4 The provisions of 40 C.F.R. 141, Subpart S – Ground Water Rule are hereby incorporated by reference  
5 including any subsequent amendments and editions. ~~This material is available for inspection at the~~  
6 ~~Department of Environment and Natural Resources, Division of Environmental Health, 2728 Capital~~  
7 ~~Boulevard, Raleigh, North Carolina. Copies obtained from the Environmental Protection Agency's~~  
8 ~~(USEPA) Drinking Water Hotline at 1 800 426 4791 or from EPA's web page at~~  
9 ~~<http://www.epa.gov/ogwdw/regs.html>.~~ Copies are available for public inspection as set forth in Rule 18C  
10 .0102 of this Subchapter. The provisions are incorporated with the following exceptions:

11 (1) Fecal indicator for source water monitoring. When systems are required to conduct  
12 triggered source water monitoring or assessment source water monitoring under 40 C.F.R.  
13 141.402 (a) and (b) respectively, any of the following three fecal indicators can be used: *E.*  
14 *coli*, ~~enterococci~~ enterococci, or coliphage.

15 (2) Corrective Action Alternatives. Ground water systems that are required to implement  
16 corrective action in accordance with 40 C.F.R. 141.403(a)(6) must determine that  
17 alternatives (a)(6)(i), ~~(a)(6)(ii)~~ (a)(6)(ii), and (a)(6)(iii) are not feasible before implementing  
18 alternative (a)(6)(iv). The rationale for selection of alternative (a)(6)(iv) must be  
19 documented in accordance with ~~15A NCAC 18C .0307(b)(10)~~. Rule 18C .0307(b)(10) of  
20 this Subchapter.

21 (3) Assessment Source Water Monitoring. The Department shall use information from the  
22 Public Water Supply Section's database and from its Source Water Assessment Program to  
23 identify sources subject to assessment source water monitoring. Systems notified by the  
24 Department must commence assessment source water monitoring for the  
25 sources identified. ~~identified by January 1, 2010~~. The system shall conduct assessment  
26 source water monitoring for any source that receives physical or chemical treatment and  
27 possesses any one of the following characteristics:

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

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

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

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

~~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.~~

(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; G.S. 130A-317; P.L. 93-523; 40 C.F.R. 141 Subpart S; Eff. October 1, 2009-2009; Amended Eff. April 1, 2014.*