

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0102

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: *This request may extend to several pages. Please be sure you have reached the end of the document.*

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (c)(21), please provide some introductory language to (A) and (B), begin both with lower-case letters, change the period to a semi-colon at the end of (c)(21)(A) and add an "and"

In (c)(21)(A), delete or define "immediately"

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0102 is Readopted as published in 33:11 NCR 1147 with changes as follows:

2
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 shall apply to this Subchapter.
5 are hereby incorporated by reference including any subsequent amendments and editions. Copies are available for
6 public inspection at the principal address of the Division of Water Resources at 512 North Salisbury Street, Raleigh
7 NC 27604-1170; 1634 Mail Service Center, Raleigh NC 27699-1634; or at the website of the Division at
8 www.newater.org.

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

- 11 (1) "Disinfection;" "Contaminant;"
12 (2) "Maximum ~~containment~~ contaminant level;"
13 (3) "Person;"
14 (4) "Public Water System;" and
15 (5) "Supplier of water."

16 Copies are available for public inspection as set forth in Rule 18C .0102 [Paragraph (a)] of this Section. [Rule.] In
17 addition, copies Copies of governing federal regulations may be obtained at no cost from the United States
18 Environmental Protection Agency's (USEPA) homepage at <http://water.epa.gov/lawsregs/rulesregs/sdwa/index.cfm>
19 or from the USEPA's Drinking Water Hotline at 1-800-426-4791.

20 (c) In addition to the definitions incorporated by reference as set forth referred to in Paragraph ~~(a)~~ (a) and (b) of
21 this Rule, the following definitions shall apply to this Subchapter:

- 22 (1) "Act" means the North Carolina Drinking Water Act.
23 (2) "Air gap" means the unobstructed vertical distance through free atmosphere between the lowest
24 effective opening from any pipe or faucet conveying a water or waste to a tank, plumbing fixture,
25 receptor, or [any] other assembly and the flood level rim of the receptacle. [receptacle where the]
26 These vertical, physical [separation is] separations shall be at least twice the effective [inside]
27 opening of the water supply [outlet and] outlet, never less than one inch (25 mm) above the
28 receiving vessel flood rim.
29 (3) "Backflow" means the undesirable reversal of flow of a liquid, gas, or other substance in a potable
30 water distribution piping system as a result of a cross-connection.
31 (4) "Backflow preventer" means an assembly, device, or method that prohibits [designed to prevent] the
32 backflow of water into potable water supply systems. [The definitions of specific backflow
33 preventer types provided in the AWWA Manual of Water Supply Practices M14: Recommended
34 Practice for Backflow Prevention and Cross Connection Control are hereby incorporated by
35 reference including subsequent amendments and editions. An approved backflow prevention
36 assembly is a backflow prevention device which has been designed and constructed by the
37 manufacturer as a complete assembly with no field modifications and consists of internally loaded,

- independently operating check valves located between fully ported, tightly closing, resilient seated shutoff valves, and resilient seated test cocks.]
- (2)(5) "Class I reservoir" means a reservoir from which water flows by gravity or is pumped directly to a treatment plant or to a small intervening storage basin and thence to a treatment plant.
- (3)(6) "Class II reservoir" means a reservoir from which the water flows by gravity or is pumped to a Class I reservoir prior to final entrance to a water treatment plant.
- (4)(7) "Class III reservoir" means an impoundment used for electric power generation, flood control, control and similar purposes, and that serves as a source of raw water for a community water system.
- (5)(8) "Cross-connection" means:
- (A) any physical connection between a potable water supply system and any other piping system, sewer fixture, container, or device, whereby water or other liquids, mixtures, or substances may flow into or enter the potable water supply system;
 - (B) any potable water supply outlet which that is submerged or is designed or intended to be submerged in non-potable water or in any source of contamination; or
 - (C) an air gap, providing a space between the potable water pipe outlet and the flood level rim of a receiving vessel that does not meet the requirements of less than twice the diameter of the potable water pipe. [required] set forth in Subparagraph (e)(2) of this [Rule.] Paragraph.
- (6)(9) "Community Water System intake" means the structure at the head of a conduit into which water is diverted from a stream or reservoir for transmission to a water treatment facilities facility.
- (7) "Disinfection" means a process that inactivates pathogenic organisms in water.
- (10) "Division" means the Department of Environmental Quality, Division of Water Resources.
- (8)(11) "Fecal Coliform" means bacteria found in the intestine of humans and other warm-blooded [warm-blooded] animals that are not normally disease-producing but serve as indicators of recent fecal contamination. Fecal Coliforms include the Family Enterobacteriaceae, Genus Escherichia Escherichia, Species Coli-coli.
- (12) High-Health Hazard: [An actual] A cross-connection or potential cross-connection involving any substance that [could] could, if introduced into the potable water supply, cause [illness,] illness or death, spread disease, or [would be a danger to the public health if introduced into the potable water supply.] have a high probability of causing such effects.
- (13) Low-Health Hazard: [An actual or potential] A cross-connection or potential cross-connection involving any substance that [could negatively affect the aesthetics of the public water system.] generally would not be a health hazard but would constitute a nuisance or be aesthetically objectionable if introduced into the potable water supply.
- (9)(14) "Mobile Home Park" means a site or tract of land where spaces are provided for lease or rental only to mobile home occupants. for the placement of mobile homes.

~~(10)~~(15) "Mobile home subdivision" means a subdivided site or tract of land in which lots are sold for ~~use by~~
~~mobile home occupants.~~ the placement of mobile homes.

~~(11)~~(16) "Non-potable water supply" means waters not approved for drinking ~~or~~ [and] or other household
uses.

(17) "Non-regulated public water system" means a public water system that meets the exclusion
conditions [for the provision to the public of water for human consumption through pipes or other
constructed conveyances if the system serves 15 or more service connections or which regularly
serves 25 or more individuals, but to which the scope of the Article 10 – North Carolina Drinking
Water Act does not apply due to the regulatory exclusion criteria] set forth in G.S. 130A-314.

~~(12)~~(18) "Potable water supply" means water approved for drinking ~~or~~ and other household uses.

~~(13)~~(19) "Raw water" means surface water or groundwater that because of bacteriological quality, chemical
quality, turbidity, color, or mineral content makes it unsatisfactory as a source for a community
water system without treatment.

~~(14)~~(20) "Raw water reservoir" means a natural or artificial impoundment used for the primary purpose of
storing raw water to be subsequently treated for use as a source of water for a community water
system.

~~(15)~~(21) "Service connection" means a piped connection from a water main for the purpose of conveying
water to a building or onto a premise premises for human use.

(A) For metered service, the service connection begins at the point immediately downstream of
the meter.

(B) For unmetered service, the service connection begins at the point of connection to the
potable water supply system.

~~(16)~~(22) "Water supply product" means any chemical or substance added to a public water system in
conjunction with a treatment technique or material used in construction of a public water system.
The term includes any material used in the manufacture of public water system components,
appurtenances, any pipe, storage tank tank, or valve that comes in contact with water intended for
use in a public water system.

History Note: Authority G.S. 130A-311 through 130A-327; P.L. 93-523; 40 C.F.R. 141.2;

Eff. January 1, 1977;

Readopted Eff. December 5, 1977;

Amended Eff. April 1, 2014; July 1, 1994; August 1, 1991; January 1, 1991; September 1,
1990; 1990.

Readopted Eff. July 1, 2019.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0202

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

Is the intent here to incorporate the EMC rules by reference? If so, please do so in accordance with 150B-21.6 (say "is incorporated by reference, including subsequent amendments and editions.")

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0202 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0202 ~~REMOVAL OF DISSOLVED MATTER AND SUSPENDED MATTER~~ SURFACE**
4 **SUPPLIES FROM CLASSIFIED WATERSHEDS**

5 Any surface water that is to receive treatment for removal of dissolved matter or suspended matter in order to be
6 used for a public water system shall be obtained from a source that meets the WS-I, WS-II, WS-III, WS-IV or WS-V
7 stream classification standards established by the Environmental Management Commission codified in 15A NCAC
8 02B. Copies are available for public inspection as set forth in Rule ~~.0102~~ .0102(a) of this Subchapter. ~~The source~~
9 ~~shall be protected from potential sources of pollution as determined by a sanitary survey of the watershed made by~~
10 ~~an authorized representative of the Department. The source supply shall be sufficient in capacity to satisfy the~~
11 ~~anticipated needs of the users for the period of design. [A supplier of water initiating a new surface water supply~~
12 ~~shall complete the contaminant source inventory of their source water protection plan in accordance with Rule~~
13 ~~.1305(c)(1) of this Subchapter prior to designing the treatment processes.]~~

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; 1979.*
20 *Readopted Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0203

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (a), when will an investigation take place? Prior to use?

In (a), line 6, what is approval required for? Again, prior to use of a water supply? I don't think that this needs to be addressed in both places in (a), but clarifying once would be helpful.

In (a), line 7, is the intent here something like "in order to be approved, the site shall meet the following requirements:"?

In (a)(1), consider changing "shall be able to protect" to "shall protect"

In (a)(2)(B), how and by whom will the determination that the well water source is from a confined aquifer? Here, do you mean "unless the well water source is from a confined aquifer"?

Please add "and" back in at the end of (a)(2)(K).

In (a)(3)(E), please make "hydrogeological" lower case.

In (a)(4), how is the chance of flooding determined?

In (a)(5), how will it be determined whether a variance will be granted? What factors will be used in making this determination?

In (b), you refer to Parts (a)(2)(D) and (E), but in (b)(1)(B), its (a)(2) in its entirety. Please verify this was intentional.

Is (b)(1) intended to only address community or non-transient water systems and (b)(2) is intended to address non-community water systems? If so, please make that clear in (b)(1).

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

Also, please consider beginning (b)(1)(A) through (D) with lower case letters, changing the periods to semi-colons in (b)(1)(A) through (C) and add an “and” at the end of (b)(1)(C). Please consider corresponding changes to (b)(2).

Also, what is the intent of (b)? Specifically, “such variance shall require the following findings” and “such variance shall require... the following requirements”? Here, are you saying that upon a finding of the following a variance shall be granted? Please review and clarify.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0203 is readopted as published in 33:11 NCR 1147 with changes as follows:

3 **15A NCAC 18C .0203 PUBLIC WELL WATER SUPPLIES**

4 (a) ~~Any~~ **A** site or sites for ~~any~~ **a** water supply well to be used as a community or non-transient, non-community
5 water system shall be investigated by an authorized representative of the ~~Division of Water Resources~~ Department.
6 Approval by the ~~Division~~ Department is required in addition to any approval or permit issued by any other state
7 agency. The site shall meet the following requirements at the time of approval:

- 8 (1) The well shall be located on a lot so that the area within 100 feet of the well ~~shall be~~ **is** owned or
9 controlled by the person supplying the water. The supplier of water shall be able to protect the
10 well lot from potential sources of pollution and to construct landscape features for drainage and
11 diversion of pollution.
- 12 (2) The minimum horizontal separation between the well and known potential sources of pollution
13 shall be as follows:
 - 14 (A) 100 feet from any sanitary sewage disposal system, sewer, or a sewer pipe unless the
15 sewer is constructed of water main materials and joints, in which case the sewer pipe
16 shall be at least 50 feet from the well;
 - 17 (B) 200 feet from a subsurface sanitary sewage treatment and disposal system designed for
18 3000 or more gallons of wastewater a day flows, unless it is determined that the well
19 water source ~~utilizes~~ **is from** a confined aquifer;
 - 20 (C) 500 feet from a septage disposal site;
 - 21 (D) 100 feet from buildings, mobile homes, permanent structures, animal houses or lots, or
22 cultivated areas to which chemicals are applied;
 - 23 (E) 100 feet from surface water;
 - 24 (F) 100 feet from a chemical or petroleum fuel underground storage tank with secondary
25 containment;
 - 26 (G) 500 feet from a chemical or petroleum fuel underground storage tank without secondary
27 containment;
 - 28 (H) 500 feet from the boundary of a ground water contamination area;
 - 29 (I) 500 feet from a sanitary landfill or non-permitted non-hazardous solid waste disposal site;
 - 30 (J) 1000 feet from a hazardous waste disposal site or in any location ~~which~~ **that** conflicts
31 with the North Carolina Hazardous Waste Management Rules cited as 15A NCAC 13A;
 - 32 (K) 300 feet from a cemetery or burial ground; ~~and~~
 - 33 ~~[(L) — 650 feet from any site used for underground gas exploration or hydraulic fracturing,~~
34 ~~including wells, discharges, materials or vehicle storage or transport; and]~~
 - 35 **[(M)]** 100 feet from any other potential source of pollution. ~~[pollution, except that backup~~
36 ~~generators and fuel to power the well may be stored temporarily onsite during a period of~~
37 ~~power outage.]~~

1 ~~[(3)]~~ The Department may approve a permanent variance for back-up generators and generator fuel
2 storage with secondary containment within the well lot when the well is critical to maintaining
3 emergency supplies, is periodically subject to loss of power during emergencies, and the supplier
4 of water is unable to provide storage outside of the 100 foot radius of the well while maintaining
5 emergency capabilities of the well.]

6 ~~[(3)]~~[(4)] The Department may require greater separation distances or impose other protective measures
7 when if necessary to protect the well from pollution; the Department shall consider as follows:
8 pollution, taking into consideration factors such as:

- 9 (A) ~~The the~~ hazard or health risk associated with the source of pollution;
10 (B) ~~The the~~ proximity of the potential source to the well;
11 (C) ~~The the~~ type of material, ~~facility facility~~, or circumstance that poses the source or
12 potential source of pollution;
13 (D) ~~The the~~ volume or size of the source or potential source of pollution;
14 (E) Hydrogeological features of the site ~~which that~~ could affect the movement of
15 contaminants to the source water;
16 (F) ~~The the~~ effect that well operation might have on the movement of contamination; and
17 (G) ~~The the~~ feasibility of providing additional separation distances or protective measures.

18 ~~[(4)]~~[(5)] The lot shall be graded or sloped so that surface water is diverted away from the wellhead. The ~~lot~~
19 well shall not have greater than a 1 percent annual chance of flooding. be subject to flooding.

20 ~~[(5)]~~[(6)] ~~When the~~If a supplier of water is unable to locate water from any other approved source and ~~when~~
21 an existing well can no longer provide water that meets the requirements of this Subchapter, a
22 representative of the Division may approve a variance for a smaller well lot and reduced
23 separation distances ~~for temporary use, to meet existing demands. Additional monitoring under~~
24 this Part or other conditions [may]shall be imposed if necessary to mitigate the increased risk
25 from the variance.

26 (b) The Division of Water Resources may grant a variance from the minimum horizontal separation distances for
27 public water supply wells set out in Parts 15A NCAC 18C .0203(a)(2)(D) and 15A NCAC 18C .0203(a)(2)(E) of
28 this Rule.

29 (1) Such variance shall require the following findings:

- 30 (A) The well supplies water to a non-community water system as defined in G.S. 130A-
31 313(10)(b) or supplies water to a business or institution, such as a school, that has
32 become a non-community water system through an increase in the number of people
33 served by the well.
34 (B) It is impracticable, taking into consideration feasibility and cost, for the public water
35 system to comply with the minimum horizontal separation distance set out in
36 Subparagraph the applicable sub-subpart of 15A NCAC 18C .0203(a)(2) of this Rule.

- 1 (C) There is no reasonable alternative source of drinking water available to the public water
2 supply system.
- 3 (D) The granting of the variance will not result in an unreasonable risk to public health.
- 4 (2) Such variance shall require that the non-community public water supply well meet the following
5 requirements:
- 6 (A) The well shall comply with the minimum horizontal separation distances set out in Parts
7 ~~15A NCAC 18C .0203(a)(2)(D) and 15A NCAC 18C .0203(a)(2)(E)~~ of this Rule to the
8 maximum extent practicable.
- 9 (B) The well shall meet a minimum horizontal separation distance of 25 feet from a building,
10 mobile home, or other permanent structure that is not used primarily to house animals.
- 11 (C) The well shall meet a minimum horizontal separation distance of 100 feet from any
12 animal house or feedlot and from cultivated areas to which chemicals are applied.
- 13 (D) The well shall meet a minimum horizontal separation distance of 50 feet from surface
14 water.
- 15 (E) The well shall comply with all other requirements for public well water supplies set out
16 in Paragraph ~~15A NCAC 18C .0203(a)~~ of this Rule.
- 17

18 *History Note: Authority G.S. 130A-315; 130A-318; P.L. 93-523; S.L. 2011-394;*
19 *Eff. January 1, 1977;*
20 *Readopted Eff. December 5, 1977;*
21 *Amended Eff. July 7, 2014; July 1, 1994; September 1, 1990; September 1, ~~1979; 1979.~~*
22 *Readopted Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0305

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (a), line 7, please consider providing the cross-reference to .0307 regarding the Engineer's Report (assuming that's the same thing.)

In (b), by "may be granted", do you mean "shall be granted"? If not, how will the determination be made whether to allow the drilling of test wells?

In (c), I assume that the approval standards referenced throughout this Paragraphs and Subparagraphs are set forth elsewhere? Perhaps in Section .1800. If so, please just verify.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0305 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0305 APPROVALS NECESSARY BEFORE CONTRACTING OR CONSTRUCTING**

4 (a) No construction shall be undertaken, and no contract for construction, alteration, or installation shall be entered
5 into into, unless the Department determines the system complies with G.S. 130A-317(c) and the Department issues
6 the authorization to construct letter. This authorization shall be issued following completion and submittal of the
7 ~~Engineer's~~ Engineer's Report and Water System Management Plan and approval of the engineering plans and
8 specifications by the Department. Authorization to construct from the Department shall be valid for ~~twenty-four~~ 36
9 months from the date of the letter. Authorization to construct may only be extended if the rules governing a public
10 water supply and site conditions have not ~~changed~~ changed since the letter was issued. The authorization to
11 construct and the approval letter for engineering plans and specifications letters from the Department shall be posted
12 at the primary entrance of the job site ~~before construction begins~~ during construction.

13 (b) Upon request, permission to drill test wells at approved sites in order to establish the quality and quantity of the
14 ground water may be granted by the Department prior to completion and submittal of the Engineer's Report and
15 Water System Management Plan and approval of engineering plans and specifications. All wells abandoned, either
16 temporarily or permanently, shall be abandoned in accordance with 15A NCAC ~~02C 2C~~ .0113 (Well Construction
17 Standards) and all local ordinances.

18 (c) Units of local government ~~which that~~ have an adopted water system extension ~~policy, program~~ [under] pursuant
19 to Section .1800 of this Subchapter, upon submission to and approval of a copy of their policy program by the
20 Department, may shall be excluded from the requirements of submitting engineering plans and specifications for
21 water main ~~extensions, and that extensions~~ [which] that would not have adverse effect upon the existing system
22 supply or pressure, provided the following requirements are met:

- 23 (1) Engineering plans and specifications for all such extensions shall be prepared by or under the
24 direct supervision of an engineer licensed to practice in the State of North Carolina.
- 25 (2) All engineering plans shall be approved by the ~~units unit~~ unit of local ~~government government's~~
26 engineering department or its consulting engineers prior to the commencement of construction.
- 27 (3) The Department shall have approved the extension ~~policy program~~ submitted by the unit of local
28 government prior to construction commencing.
- 29 (4) The extension ~~policy program~~ submitted for review and approval by the Department shall provide
30 for establishing ownership, operation operation, and maintenance of water system extensions,
31 extensions and shall constitute prior notice of proposed construction.
- 32 (5) Where design is to be based on a local government's standard specifications in lieu of written
33 separate specifications for each extension project, the standard specifications shall have been
34 previously approved by the Department.
- 35 (6) The local government shall have obtained from the Department a letter stating they have met the
36 ~~aforementioned requirement~~ requirements set forth in Section .1800 of this Subchapter and are

1 ~~excluded from the requirement for submitting detailed engineering plans and specifications for~~
2 ~~each minor extension in keeping with the intent of this Rule.~~

- 3 (7) ~~Where such minor additions or extensions have been made, an~~ An annual up-to-date plan of the
4 entire public water system shall be ~~submitted for review and approval~~ maintained by the supplier
5 of water and made available on request by the Department.

6
7 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*
8 *Eff. January 1, 1977;*
9 *Readopted Eff. December 5, 1977;*
10 *Amended Eff. July 1, 1994; September 1, 1990; September 1, 1979;*
11 *Temporary Amendment Eff. October 1, 1999;*
12 *Amended Eff. August 1, ~~2000;2000~~.*
13 *Readopted Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0307

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: *This request may extend to several pages. Please be sure you have reached the end of the document.*

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (a), do you also want to include the Operation and Maintenance Plan and the Emergency Management Plan, or are these not always required?

In (c), please add something like "the following information" to provide some introduction to (c)(1) through (8). I note that you've already done this in (b).

In (c)(6)(B), what is the specific Rule for record keeping?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0307 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0307 ENGINEER'S REPORT, WATER SYSTEM MANAGEMENT PLAN AND**
4 **OTHER PLANS**

5 (a) The applicant shall submit to the Department an ~~Engineer's~~ Engineer's Report and Water System Management
6 Plan covering the basic factors and principles considered in planning of the project. Plan.

7 (b) Engineer's Report. The Engineer's Report shall contain a system description for the entire project, including
8 scheduled phase development and the following information, where applicable:

- 9 (1) description of any all existing water ~~system~~ systems related to this project;
- 10 (2) identification of the municipality, community, area, or facility to be served by the proposed water
11 system;
- 12 (3) the name and address of the applicant;
- 13 (4) a description of the nature of the establishments and of the area to be served by the proposed water
14 system;
- 15 (5) a description of the future service areas of the public water system for 5, 10, 15 and 20 years;
- 16 (6) consideration of alternative plans for meeting the water supply requirements of the area, including,
17 for new systems, obtaining water service from an existing system;
- 18 (7) for applicants seeking State loan or grant support for the project, financial considerations,
19 including:
 - 20 (A) any technical alternatives;
 - 21 (B) the costs of integral units; and
 - 22 (C) the total costs.
- 23 (8) population records and trends, present and anticipated future water demands, and present and
24 future yield of source or sources of water supply, including provisions to supply water to other
25 systems;
- 26 (9) character of source or sources of water supply, including:
 - 27 (A) hydrological or hydrogeological data;
 - 28 (B) stream flow rates or well yields;
 - 29 (C) for surface sources, analytical results for chemical, mineral, bacteriological, and physical
30 qualities; and
 - 31 (D) the location and nature of sources of pollution.
- 32 (10) proposed water treatment processes, including:
 - 33 (A) the criteria and basis of design of units;
 - 34 (B) the methods or procedures used in arriving at recommendations; and
 - 35 (C) the reasons or justifications for any deviations from conventional or indicated process or
36 method.

- (11) for purchased water, a copy of the agreement with the supplier and the hydraulic analysis showing the supplier's capabilities for supplying the purchased water;
- (12) a description of the design basis of the source, treatment, and distribution system, and the useful life of all sources, treatment, and transmission facilities including pipes, pumping stations, and storage facilities;
- (13) for existing system projects intending to alter or expand a distribution system, ~~provide~~ a statement of maximum daily treated water supply and maximum daily ~~demand. Provide~~ demand, including supporting documentation and calculations; and
- (14) for existing systems, a prioritized list of infrastructure improvements.
- (c) Water System Management Plan. The Water System Management Plan shall document, where applicable, the ability to finance, operate, and manage the system in accordance with this Subchapter for the current owner and for any entity that assumes ownership of the water system within the first 24 months of operation:
- (1) Organization:
- (A) ~~a~~ description of organizational structure or a chart showing all aspects of water system management and operation;
- (B) ~~an~~ identification of positions responsible for policy decisions ensuring compliance with State rules and the day-to-day operation of the system; and
- (C) ~~copies a copy of any all~~ contracts for management or operation of the water system by persons or agencies other than the system's owner.
- (2) Ownership:
- (A) identify the ownership ~~structure (sole structure, such as sole~~ proprietor, partnership, corporation, limited liability company, homeowner association, nonprofit organization, local government unit, state or federal agency, or other legal ~~entity) entity~~, and disclose if the ownership of the system is expected to change once the system is ~~constructed, and~~ constructed and, if known, identify the future owners;
- (B) provide ~~the~~ mailing address and street address of the ~~owner, owner~~ and ~~the~~ physical location of the water system;
- (C) disclose any encumbrances, trust indentures, bankruptcy decrees, legal orders or proceedings, or other items that may affect or limit the owner's control over the system and describe how compliance with the requirements of this Subchapter will ~~still~~ be maintained; and
- (D) describe the legal ~~authority, such [authority (such~~ authority, such as ownership, leases or recorded ~~easements [easements)] easements~~, allowing ~~inspection-repair inspection, repair,~~ and maintenance of system components.
- (3) Management qualifications:
- (A) describe the qualifications of the owners and managers of the water system, including ~~any~~ training and experience in owning or managing a water system; and

- (B) provide the name and Public Water Supply Identification Number of all public water systems owned within the last five years as well as ~~any~~ all systems operated under contract for another owner within the last five years. ~~For systems with penalties assessed,~~
If any system has been assessed a penalty for violating a requirement set forth in this Subchapter. describe how the owner will prevent similar violations at this system.
- (4) Management training. Describe plans to keep management current with regulatory requirements for managing and operating a public water system.
- (5) Policies. ~~At a minimum, the~~ The system shall have policies regarding the following procedures:
- (A) cross-connection control;
 - (B) customer information, complaints, and public education;
 - (C) budget development and rate structure;
 - (D) response and notification if water quality violations occur;
 - (E) customer connection, disconnection, billing, and collection; and
 - (F) safety procedures.
- (6) System monitoring, reporting and record keeping. ~~At a minimum~~ [minimum] ~~the~~ The applicant shall provide:
- (A) ~~A~~ a summary of the applicable system monitoring and reporting requirements; and
 - (B) ~~A~~ a description of procedures for keeping and compiling records and reports in accordance with ~~Rule 1526~~ of this Subchapter.
- (7) Financial Plans. The plan shall contain the following financial information, where applicable:
- (A) Units of Local Government:
 - (i) For projects that require the unit of local government to incur debt, the unit of local government shall submit a statement from the Local Government Commission stating that debt issue has been ~~approved; or~~ approved.
 - (ii) For projects that do not require the unit of local government to incur debt, the unit of local government shall submit the following:
 - (I) a statement from the unit of local government documenting that they are in compliance with G. S. 159, Article 3, The Local Government Budget and Fiscal Control Act; and
 - (II) estimated revenues, ~~expenditures~~ expenditures, and rate structure for the construction, operation and maintenance, ~~administration~~ administration, and reasonable expansion of the project. This information shall be provided on a form designated by the Department and shall demonstrate that revenues are greater than expenses.
 - (B) The North Carolina Utilities Commission's financial determination may be used as the financial plan for systems subject to its regulations:

- 1 (i) submit a copy of the Order Granting Franchise and Approving Rates from the
2 North Carolina Utility Commission; or
3 (ii) submit a copy of the Order Recognizing Continuous Extension and Approving
4 Rates from the North Carolina Utilities Commission.

5 (C) Non-transient non-community water systems. Owners of existing non-transient non-
6 community water system(s) which receive no violation of this Subchapter ~~in~~ during the
7 preceding three years shall provide a description of ~~any~~ negative ~~impact~~ impacts the
8 project would have on the financial ability to comply with this Subchapter. The owner of
9 either a proposed new or existing non-transient non-community water system ~~with any~~
10 that was in violation of this Subchapter within the prior three years shall follow the
11 requirements in Part ~~(e)(7)~~(D) of this ~~Rule.~~ Subparagraph.

12 ~~(C)(D)~~ All other community and non-transient non-community water systems shall document the
13 following:

- 14 (i) analysis that compares anticipated revenues with planned expenditures for a ~~five~~
15 ~~year~~ five-year period that demonstrates a positive cash flow in each year, and a
16 20-year equipment replacement cost plan documenting the ~~method(s)~~ methods
17 to finance equipment replacement;
18 (ii) the creation and funding of a continuous operating cash reserve greater than or
19 equal to one-eighth of the annual operating, ~~maintenance~~ maintenance, and
20 administrative expenses for the water system. The operating cash reserve shall
21 be fully funded by the end of the first year of operation;
22 (iii) the creation and funding of an emergency cash reserve greater than or equal the
23 cost of replacing the largest capacity pump. The emergency cash reserve shall be
24 fully funded by the end of the fifth year of operation; and
25 (iv) a description of the budget and expenditure control procedures that assure
26 budget control for the ~~applicant which includes~~ applicant, including procedures
27 or policies to prevent misuse of funds and a demonstration that the system has
28 adopted generally accepted accounting ~~procedures; and~~ procedures.
29 (v) ~~in~~ In lieu of Sub-Items (ii) and (iii) of this Paragraph, substitute documentation
30 ~~may~~ shall be accepted in the following instances:
31 (I) an applicant with multiple water systems showing reserves affording
32 greater or equal capabilities; or
33 (II) an applicant showing equivalent financial capacity to comply with
34 requirements of this Section.

35 (8) One Water System Management Plan may be submitted on behalf of an applicant owning and
36 operating multiple water systems or an applicant pursuing multiple alterations or expansions and
37 may include future projected construction or system acquisitions. The applicant shall submit a new

Water System Management Plan for a project not covered under the existing Water System Management Plan or ~~when~~ if violations of this Subchapter occur or continue at a system under an applicant's ownership or control.

(d) Operation and Maintenance Plan. The plan ~~does not have to be submitted to the Department but~~ shall be completed prior to submitting the applicant's certification in accordance with ~~Paragraph (e) of Rule .0303.0303(c)~~ of this Section. This plan shall be accessible to the operator on duty at all times and available to the Department upon request. The Operation and Maintenance Plan shall include, at a minimum, a description of the location and routine operation and maintenance procedures for:

- (1) components of the treatment facility;
- (2) pumps, meters, valves, blowoffs, and hydrants;
- (3) backflow devices;
- (4) storage tanks; and
- (5) all other appurtenances requiring routine operation and maintenance.

(e) Emergency Management Plan. ~~The plan~~ The Emergency Management Plan ~~does not have to be submitted to the Department, but~~ shall be completed prior to submitting the applicant certification required in ~~Paragraph (e) of Rule .0303.0303(c)~~ of this Section. The Emergency Management Plan shall be available to personnel responsible for emergency management and operator on duty at all times and available to the Department upon request. The supplier of water shall consider using the principles, practices, forms, nomenclature, structure, and definitions found in the National Incident Management [System,] System and ~~The plan~~ shall contain the following information where applicable:

- (1) For community water systems, a plan with the following elements is shall be required:
 - (A) an identification and phone numbers of personnel responsible for emergency management, including public water system, local, state, State, and federal emergency contacts;
 - (B) an identification of foreseeable natural and human-caused emergency ~~event~~ events, including water shortages and outages;
 - (C) a description of the emergency response plan for each identified event;
 - (D) a description of the notification procedures; and
 - (E) an identification and evaluation of all facilities and equipment whose failure would result in a water outage or water quality violations.

(2) For a supplier of water [who] that treats and furnishes water from a surface water source, completion of the Source Water Protection Plan in accordance with Rule .1305 of this Subchapter shall fulfill the Emergency Management Plan requirement.

~~(2)(3)~~ (3) For non-transient, non-community water systems, the plan shall contain the positions and phone numbers of responsible persons to contact in the event of an emergency, including public water system, local, state, State and federal emergency contacts.

1 *History Note:* *Authority G.S. 130A-315; 130A-317; P.L. 93-523;*
2 *Eff. January 1, 1977;*
3 *Readopted Eff. December 5, 1977;*
4 *Amended Eff. July 1, 1994; September 1, 1990; June 30, 1980; September 1, 1979;*
5 *Temporary Amendment Eff. October 1, 1999;*
6 *Amended Eff. August 1, 2000; ~~2000~~.*
7 *Readopted Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0402

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (g)(5), what is meant by "another water supply source may be accepted"? By whom and how will this determination be made?

In (i), what is meant by "approved and equally efficient"? How and by whom is this determination to be made?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0402 is readopted as published in 33:11 NCR 1147 with changes 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 Water Resources, Department of Environment and Natural Resources, Department,~~
6 codified in 15A NCAC 02C. Copies are available for public inspection as set forth in Rule .0102 [0102(a)] of this
7 Subchapter.

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

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

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

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

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

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

25 (A) Structures structures shall comply with applicable provisions of state and local building
26 ~~codes; codes.~~

27 (B) Drainage drainage shall be provided by floor drain, wall drain, ~~or [and/or] or~~ slope to
28 ~~door; door.~~

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

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

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

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

36 (A) A a well-head cover shall be hinged and constructed so that it can be lifted by one ~~person;~~
37 person.

- (B) ~~A~~ a locking mechanism shall be ~~provided; and~~ provided.
- (C) ~~The structure shall not be permanently fastened to the slab. permanent fastening to the slab (such as with bolts) shall not be permitted.~~
- (3) Fencing and temperature protection. Fencing and temperature protection shall be constructed as follows:
- (A) ~~The~~ the fence height shall be a minimum of six ~~feet; feet.~~
- (B) ~~The~~ the fence shall be constructed of chain link with locked ~~access; access.~~
- (C) ~~The~~ the fence shall enclose the well, hydropneumatic tank, and associated ~~equipment; equipment.~~
- (D) ~~Access access~~ shall be provided for maintenance and ~~operation; and operation.~~
- (E) ~~The~~ the well, piping, treatment equipment, and electrical controls shall be protected against freezing. Wrapping with insulation ~~is shall be~~ acceptable for appurtenances such as the air vent, meter, valves, and sample ~~taps taps.~~ provided they are visible and accessible. Insulation shall be jacketed.
- (g) Yield:
- (1) Wells shall be tested for yield and drawdown. A report or log of at least a 24-hour drawdown test to determine yield shall be submitted to the ~~Division of Water Resources~~ Department for each well.
- (2) Wells shall be located so that the drawdown of any well shall not interfere with the required yield of another well.
- (3) The combined yield of all wells of a public water system shall provide in ~~12 hours~~ 12-hours pumping time the ~~average daily demand~~ daily flow requirements as determined in Rule .0409 of this Section.
- (4) The capacity of the permanent pump to be installed in each well shall not exceed the yield of the well as determined by the drawdown test.
- (5) A residential community water system using well water as its source of supply and designed to serve 50 or more connections shall provide at least two wells. A travel trailer park or campground designed to serve 100 or more connections shall provide at least two wells. In lieu of a second well, another approved water supply source may be accepted.
- (6) A totalizing meter shall be installed in the piping system from each well.
- (h) Initial Disinfection of Water Supply Well. All new wells, and wells that have been repaired or reconditioned [reconditioned], shall be cleaned of foreign substances such as soil, grease, and oil, and then shall be disinfected. [disinfected in accordance with Rule .1002 of this Subchapter.] A representative sample or samples of the water (free of chlorine) shall be collected and submitted to a certified laboratory for bacteriological analyses. The water supply shall not be placed into service after disinfection until bacteriological test results of representative water samples analyzed in a certified laboratory are found to be free of bacteriological contamination.

1 ~~(h)~~ (h) 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~~ State Laboratory of Public
3 Health or to a certified laboratory. The results of the analysis shall demonstrate that the water is treatable to meet the
4 water quality standards in Section .1500 of this Subchapter Subchapter and needed this treatment shall be provided
5 before the well is placed into service.

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

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

12 *Eff. January 1, 1977;*

13 *Readopted Eff. December 5, 1977;*

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

15 *~~1980.~~*

16 *Readopted Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0403

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: *This request may extend to several pages. Please be sure you have reached the end of the document.*

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

When is this Rule applicable? Please note that we read Rules without the titles as they can be changed without going through the rulemaking process. Please make it clear within the body of the text of the Rule.

In (b), delete or define "reasonably"

What is the overall intent of (d)? Is it to say that if (d)(1) through (3) are met, then it will be approved? If so, please change your "may" to "shall" and say something like "Existing impoundments shall be approved as raw water sources if the following conditions are met" Otherwise, please say how this determination will be made.

In (d)(3), please add commas before and after "along with other qualified consultants as needed"

In (d)(3), delete or define "qualified"

Should the cross-reference in (d)(3)(C) be to Paragraph (c) of this Rule?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0403 is readopted as published in 33:11 NCR 1147 with changes as follows:

3 **15A NCAC 18C .0403 SURFACE WATER FACILITIES**

4 (a) Unimpounded Stream. Both the minimum daily flow of record of the stream and the estimated minimum flow
5 calculated from rainfall and run-off shall exceed the maximum daily draft for which the water treatment plant is
6 ~~designed~~ designed, with due consideration given to requirements for future expansion of the treatment plant. The
7 Department ~~may~~ shall approve a water plant capacity greater than the minimum daily flow of record of the stream
8 ~~when if~~ rules or regulations of other government agencies will not be violated. ~~The maximum allowable system~~
9 ~~expansion shall be based on the minimum daily flow of record of the stream.~~

10 (b) ~~Pre settling Reservoirs. Construction of a pre settling or pre treatment reservoir shall be required where wide~~
11 ~~and rapid variations in turbidity, bacterial concentrations or chemical qualities occur or where the following raw~~
12 ~~water quality standards are not met: turbidity 150 NTU, coliform bacteria 3000/100 ml, fecal coliform bacteria~~
13 ~~300/100 ml, color 75 CU.~~

14 ~~(c)(b)~~ Impoundments. Raw water storage capacity shall be sufficient to reasonably satisfy the designed water supply
15 demand during periods of drought.

16 ~~(d)(c)~~ Clearing of Land for Impoundment. The area in and around the proposed impoundment of class I and class II
17 reservoirs shall be cleared as follows:

- 18 (1) The area from normal full level to five feet below the normal pool elevation of the impoundment
19 shall be cleared and grubbed of all vegetation and shall be kept cleared until the reservoir is filled.
20 Secondary growth shall be removed prior to flooding.
- 21 (2) The entire area below the ~~five foot~~ five-foot water depth shall be cleared and shall be kept cleared
22 of all growth of less than six inches in diameter until the reservoir is filled. Stumps greater than six
23 inches in diameter ~~may~~ shall be cut off at ground level.
- 24 (3) All brush, trees, and stumps shall be burned or removed from the proposed reservoir.

25 ~~(e)(d)~~ Existing Impoundments. Existing impoundments may be approved as raw water sources as follows:

- 26 (1) The requirements of Paragraph (c) of this ~~Rule~~, Rule and Section .0200 of this Subchapter shall be
27 ~~met;~~ met.
- 28 (2) A class I or class II reservoir shall meet the requirements of Section .1200 of this ~~Subchapter; and~~
29 Subchapter.
- 30 (3) The supplier of water shall have an engineer along with other qualified consultants as needed
31 conduct a study of the impoundment and provide the Department with information to determine
32 whether the requirements of this Subchapter are met. The study shall ~~include;~~ include as follows:
 - 33 (A) Plans plans and specifications of the impounding structure;
 - 34 (B) Information information concerning clearing of the land for ~~impoundment~~ the
35 impoundment, as provided in Paragraph (d) of this Rule;
 - 36 (C) Information information concerning sources of pollution on the watershed;

(D) ~~Documentation~~ documentation of control by the supplier of water of the impoundment and ~~50-foot~~ 50-foot margin around the impoundment measured from the normal pool elevation;

(E) ~~Information~~ information concerning the quality of the water and sediments which could cause water quality ~~fluctuations~~ fluctuations, such as lake stratification, ~~turnover~~ turnover, and algae bloom; and

(F) ~~Other~~ other information necessary to show that the proposed source will meet the requirements of this Subchapter.

~~(f)(c)~~ A margin of at least 50 feet around a class I and class II ~~reservoir~~ reservoir, measured from the normal pool ~~elevation~~ elevation, shall be owned or controlled by the ~~water supplier~~ supplier of water.

~~(g)(f)~~ Intakes, Pumps, Treatment Units, and Equipment. Raw water intakes, pumps, treatment ~~units~~ units, and equipment shall be designed to provide water of potable quality ~~meeting~~ that meets the water quality requirements stated in Section .1500 of this Subchapter.

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

Eff. January 1, 1977;

Readopted Eff. December 5, 1977;

Amended Eff. July 1, 1994; July 1, 1992; September 1, 1990; 1990.

Readopted Eff. July 1, 2019.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0404

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

Please make the punctuation in (c), (d), and (i) consistent. Alternatively, please consider providing some introductory language to the Subparagraphs that follow.

In (c)(2), delete or define "easily" in "easily accessible"

In (c)(3), what is meant by "suitable material"? As determined by what or whom?

In (d), delete or define "in detail"

In (d)(1), what is meant by "approved and equally efficient"? How and by whom is this determination to be made?

In (d)(2), what is meant by "as described above"? Do you mean this Subparagraph? This Paragraph? Please be more specific.

In (f), what is "water of questionable quality"

In (h), delete or define "adequate" and "routine"

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0404 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0404 WATER TREATMENT FACILITIES**

4 (a) Physical Security and Facility Protection. Treatment equipment and chemicals shall be secured against
5 unauthorized access and shall be protected against the weather as follows:

- 6 (1) Structures shall comply with provisions of state and local building ~~codes;~~ codes.
7 (2) Drainage shall be provided by floor drain, wall drain, ~~or~~ [and/or] ~~or~~ slope to ~~door;~~ door.
8 (3) Access to the structure shall be a doorway with minimum dimensions of 36 inches wide and 80
9 inches high ~~or larger.~~ The doorway shall be large enough to accommodate installation or removal
10 of ~~equipment; and equipment.~~
11 (4) The structure shall have space to facilitate operation and maintenance of treatment equipment,
12 storage of chemicals, required piping and appurtenances, electrical controls, and laboratory
13 testing.

14 (b) Mixing and Dispersion of Chemicals. Provisions shall be made for mixing and dispersion of chlorine and other
15 chemicals applied to the water. ~~All facilities~~ Facilities treating surface water or ground water influenced by surface
16 water shall comply with the disinfection requirements in Rule .2002 of this Subchapter.

17 (c) Chemical Feed Machines

- 18 (1) Durable chemical feed machines designed for adjustable accurate control of feed rates shall be
19 installed for application of all chemicals necessary for ~~appropriate~~ treatment of the water.
20 Sufficient stand-by units to assure uninterrupted operation of the treatment processes shall be
21 provided. Continuous chemical application ~~must~~ shall be protected from electrical circuit
22 interruption ~~which that~~ could result in ~~overfeed, underfeed~~ overfeed or ~~[underfeed,]~~ underfeed or
23 otherwise interrupt the feed of chemicals.
24 (2) Chemical feed lines from the feeders to the points of application shall be of material sized for the
25 ~~design flow rate, corrosion resistant, easily~~ design flow rate and corrosion resistant and shall be
26 easily accessible for cleaning and protected against freezing. ~~Length~~ The length and the number of
27 bends shall be reduced to a minimum.
28 (3) Piping and appurtenances shall be constructed of suitable material for the chemical being added
29 and the specific application.
30 (4) A separate feeder shall be used for each chemical applied.

31 (d) Disinfection Equipment:

- 32 (1) Equipment designed for application of ~~chlorine;~~ chlorine or some other approved, equally efficient
33 disinfectant shall be provided. ~~Stand-by~~ Spare units shall be ~~provided;~~ available. The plans and
34 specifications shall describe the equipment in detail.
35 (2) Chlorinators shall be installed in tightly constructed, above ground rooms with mechanical
36 ventilation to the outside air. The capacity of exhaust fans shall be sufficient to discharge all air in
37 the rooms every ~~30 seconds to~~ [one] minute. ~~60 seconds.~~ The fans or their suction ducts shall be

located not more than eight inches above floor level. Provisions for entrance of fresh air shall be made. The point of discharge shall be so located as not to contaminate the air in any building or inhabited areas. Electrical switches for operation of fans shall be located outside the chlorinator rooms. Rooms used for storage of chlorine cylinders shall be designed as described above.

~~(e) Safety Breathing Apparatus. Self contained emergency breathing apparatus for operators shall be stored outside rooms where gaseous chlorine is used or stored.~~

~~(f)~~(c) Meters and Gauges. Meters and gauges, including raw and finished water meters, shall be installed to indicate and record water flow entering the treatment ~~plant~~ facility and water pumped or conducted to the distribution system.

~~(g)~~(f) Prevention of Backflow and ~~Back Siphonage. Backsiphonage. Submerged~~ Water treatment facilities shall not have submerged inlets and interconnections whereby non-potable water, ~~or~~ water of questionable quality, or other liquids may be siphoned or forced into or otherwise allowed to enter the finished water supply ~~shall not be permitted.~~

~~(h)~~(g) Chemical Storage. Separate space for storing at least a 30-day ~~30 days~~ supply of chemicals shall be provided. A separate room or partitioned space shall be provided for storage of dry fluoride chemicals or liquid fluoride chemicals in portable containers.

~~(i)~~(h) Laboratory. Adequate space, equipment, and supplies shall be provided for daily, routine chemical and bacteriological tests. A layout of laboratory furniture and equipment shall be included in the plans.

~~(j) Toilet Facilities. Toilet facilities shall be provided for the plant personnel.~~

~~(k)~~(i) Waste Handling and Disposal.

(1) Provisions ~~must~~ shall be made for disposal of water treatment plant ~~wastes~~ wastes, such as clarification sludge, softening sludge, iron-manganese sludge, filter backwash ~~water~~ water, and brines. Untreated waste shall not be returned to the head of the water treatment plant.

(2) Recycling of supernatant or filtrate from waste treatment facilities treating filter wash water, sedimentation basin ~~sludge~~ sludge, or clarifier basin sludge to the head of the water treatment plant may be allowed ~~when~~ if the following conditions are met:

(A) The water recycled shall be less than 10 percent by volume of the raw water entering the water treatment ~~plant.~~ plant.

(B) A permit has been issued by the appropriate regulatory authority for discharge of wastes to sanitary sewer, stream, lagoon or spray ~~irrigation.~~ irrigation; and irrigation.

(C) The raw water does not contain excessive algae, finished water taste and odor problems are not ~~encountered~~ encountered, and trihalomethane ~~contaminant~~ levels ~~in the distribution system~~ do not exceed allowable levels as set forth in Rule 1517 in this Subchapter.

*History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;
Eff. January 1, 1977;*

- 1 *Readopted Eff. December 5, 1977;*
- 2 *Amended Eff. July 1, 1994; ~~1994~~.*
- 3 *Readopted Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0405

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

Please add a colon at the end of (a).

In (c), when are "well yields and pumping capacities" sufficient?"

In (c)(3), delete or define "properly"

In (d)(2), please add "are" before "out of operation"

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0405 is readopted as published in 33:11 NCR 1147 with changes 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, or equivalent material approved by the
7 ~~Division. Department.~~ The construction joints between side walls and the covers of concrete tanks
8 or reservoirs shall be above ground level and above flood ~~level.~~ level. except that clearwells
9 constructed below filters may be excepted from this requirement ~~when if~~ total design, including
10 waterproof joints, gives equal 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 a
15 locking device.
- 16 (3) Venting. Finished water ground storage tanks or reservoirs shall have vents with screened,
17 downward directed openings. The vent and screen shall be of corrosion resistant material.
- 18 (4) Overflow. The overflow pipes for finished water ground storage tanks or reservoirs shall not be
19 connected directly to sewers or storm drains. Screens or other devices to prevent access by
20 ~~rodents, insects, etc.~~ vermin, such as rodents and insects, shall be provided in the overflow pipe.
- 21 (5) Inlets and Outlets. Water supply inlets and outlets of finished water ground storage tanks and
22 reservoirs shall be located and designed to provide circulation of the water and to meet the CT
23 requirements in Section .2000 of this Subchapter. Baffles shall be constructed where necessary to
24 provide thorough circulation of the water.
- 25 (6) Drain Valves. All finished water ground storage tanks and reservoirs shall be equipped with drain
26 ~~valves.~~ valves [which] that allow for unobstructed emptying of the tank.

27 (b) Elevated Storage Tanks:

- 28 (1) Standards. The specifications for elevated tanks, stand-pipes, towers, paints, coatings, and other
29 appurtenances shall meet the appropriate ANSI/AWWA Standards ~~D-100-84 and D-101-53(R86)~~
30 D100 11, D102 17, and D103 09 of the American Water Works Association, ~~Inc. that are hereby~~
31 Inc., incorporated by reference including any subsequent amendments and editions. Copies may be
32 obtained are available for public inspection as set forth in Rule ~~.0102~~ [.0102(a)] .0503 of this
33 Subchapter.
- 34 (2) Elevation of Storage Tanks. The elevation of storage tanks shall be sufficient to produce a
35 designed minimum distribution system pressure of 20 pounds per square inch at peak demand (fire
36 flow) and 30 pounds per square inch during peak flow.

(3) Elevated storage tanks shall be designed to minimize water age by avoiding short-circuiting of flows and dead-zones.

~~(3)~~(4) Drain. Elevated storage tanks shall be equipped with drain valves. valves [which] that allow for unobstructed emptying of the tank.

(c) Hydropneumatic Storage Tanks (Pressure Tanks) Tanks, referred to in this Rule as Pressure Tanks:

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

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

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

(4) Controls. Automatic pressure and start-stop controls for the operation of pumps shall be provided.

(5) Hydropneumatic Storage Tanks. Hydropneumatic storage tanks shall conform to the construction and inspection requirements for pressure vessels adopted by the North Carolina Department of Labor and codified in 13 NCAC 13 that is hereby 13, incorporated by reference including any subsequent amendments and editions. Copies are available for public inspection as set forth in Rule .0102 [.0102(a)] of this Subchapter.

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

(d) High Yield Aquifers:

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

(2) Auxiliary Power. Such a system A system relying on high-yield aquifers under Paragraph (d) of this Rule shall have an adequate number of wells equipped with sufficient pumping capacity so that the required flow rate may will be maintained with if the single largest capacity well and pump out of operation. Auxiliary power generating equipment shall be provided for each well sufficient to operate the pump, lights, controls, chemical feeders, alarms, and other electrical equipment. equipment as may be necessary.

1 (3) Pump Control. **Hydropneumatic Pressure** tanks designed in accordance with Paragraph (c) of this
2 Rule and Section .0800 of this Subchapter shall be provided to maintain pressure and control the
3 pump operation.

4 (4) Alarm System. An alarm system shall be provided that will send a visual or audible signal to a
5 constantly monitored location so that the water system operator will be advised of a primary
6 power failure.
7

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

9 *Eff. January 1, 1977;*

10 *Readopted Eff. December 5, 1977;*

11 *Amended Eff. April 1, 2014; July 1, 1994; September 1, 1990; October 1, 1986; June 30, 1980;*

12 ~~*1980.*~~

13 *Readopted Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0406

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (a), line 7, please add "which is"

In (b), since you've not done it in (a), please delete "Cross-Connections:"

In (b), line 22, delete "that" in "that has"

In (b), line 24, I assume that the approval standards are set forth elsewhere in rule, statute, or CFR?

In (b), how is the approval to take place in an emergency?

How (b)(1) through (6) go with (b)? Please provide some sort of introduction to make the connection. Should these be separate Paragraphs? I'm struggling with the formatting here.

In (b)(1), by "where required" do you mean "as required by the Plumbing Code"?

In (b)(1), what is meant by "appropriate"? Here, is this set forth in the Plumbing Code (if so, I think it's okay as written – please just verify.)

Please revise (b)(2) for purposes of clarity. Is the intent here that (b)(2)(A) through (D) require review and approval by the Department? Since this is the first sentence, it's not clear whether "the following connection types:" is applicable here or is applicable to the sentences after in (b)(2). I think that content wise it would probably be okay if this Paragraph was rearranged a bit for clarity.

Please provide some sort of introduction to (b)(3)(A) through (G). As written, it's not entirely clear when these will apply.

In (b)(3)(A), are the ASSE standards incorporated elsewhere in your Rules? If not, please do so.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

In (b)(3)(B), are the AWWA standards incorporated by reference elsewhere in your Rules?

In (b)(3)(D), since you've not done it elsewhere in these Subparagraphs, delete "Filling stations for special use tanks or tankers containing pesticides, fertilizers, other toxic chemicals, or their residues."

In (b)(3)(E), delete or define "properly" in "properly installed"

In (b)(3)(F), delete "Non-Potable Storage."

I don't understand the use of "and" at the end of (b)(3)(F)(ii). Please review formatting of (b)(3)(F)(i) and (ii) for purposes of clarity.

In (b)(3)(G)(ii), delete or define "easily" and "regular."

Also, what are the "necessary test cocks and drains for testing"? I assume your regulated public is familiar?

Please provide some sort of introduction to (b)(3)(G)(i) through (iii) in (b)(3)(G).

In (b)(3)(G)(iii), I assume that the approval standards for backflows are set forth elsewhere? If so, please just confirm.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0406 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0406 DISTRIBUTION SYSTEMS**

4 (a) Water Pipe Materials. ~~Distribution mains~~ Water pipes shall be cast iron, ductile iron, ~~asbestos-cement,~~
5 reinforced concrete, 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 certified as meeting the specifications of~~
7 NSF/ANSI Standard 61 Drinking Water System Components – Health Effects, [which is] hereby incorporated by
8 reference including any subsequent amendments and editions. Copies may be obtained are available for public
9 inspection as set forth in Rule ~~.0102~~ [.0102(a)] .0503 of this Subchapter. The pressure rating class of the pipe shall
10 be in excess of the maximum design pressure within that section of the water distribution system. The quality of
11 pipe to be used shall be stated in the project specifications.

12 ~~(b) Cross Connections~~

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

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

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

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

29 (B) ~~When the reservoir or tank is filled entirely by water from a public water supply:~~

30 (i) ~~If a covered ground reservoir or covered elevated tank is used, an~~
31 ~~approved reduced pressure back-flow preventor or an approved double~~
32 ~~check valve assembly may be used. The back-flow prevention device~~
33 ~~shall be installed in such a manner as to afford adequate protection, be~~
34 ~~easily accessible, and include all necessary pressure gauges and drains~~
35 ~~for testing. Gate valves shall be installed in the line at both ends of the~~
36 ~~back-flow prevention device.~~

- (ii) — If an uncovered ground reservoir or uncovered elevated tank is used, a complete physical break shall be provided between the reservoir or elevated tank and the public supply. The physical break between the inlet pipe and the top or overflow rim of the reservoir shall be at least twice the diameter of the inlet pipe.
- (4) — All cross connections between potable water supplies and non-potable or unprotected supplies that are not specifically covered in the categories in this Paragraph will be considered special problems and the protective devices required shall be determined by the Department on the basis of the degree of health hazard involved.
- (5) — Persons desiring to install non-potable water supplies in conjunction with a public water supply shall submit detailed plans and specifications in triplicate showing the non-potable water supply and its relation to the potable water supply to the Department in accordance with Rule .0302(a) of this Subchapter.
- (6) — Any such interconnection to a potable water system is subject to the approval of the water supplier and shall not be made until authorized by the water supplier in addition to the Department.
- (7) — No person shall fill special use tanks or tankers containing pesticides, fertilizers, other toxic chemicals, or their residues from a public water system except at a location equipped with an over-the-rim free discharge of water or a reduced pressure backflow preventer properly installed on the public water supply that has been approved by the Department. No supplier of water shall permit the filling of such special use tanks or tankers except at locations so equipped.
- (b) Cross-Connections: No person shall construct, [maintain] maintain, or operate a physical arrangement whereby a public water system that has a cross-connection without the use of proper backflow protection. No person shall introduce any water into the distribution system of a public water supply through any means other than from a source of supply duly approved by the Department or its [representatives,] representatives or make any physical connection between an approved supply and unapproved supply unless authorized in an emergency by the Department or its representative.
- (1) Service Connection Relation to Plumbing Code. No supplier of water shall provide a service connection to any plumbing system that does not comply with the North Carolina State Building Code, Volume II, and [any] all applicable local plumbing codes. [code, as determined by local plumbing code officials.] Where required, [The] the supplier of water shall install or require to be installed [the] an appropriate testable backflow prevention assembly prior to making the service connection. Design of backflow prevention assemblies for service connections [do] shall not require Department review.
- (2) Connections Requiring Departmental Review. Connections between a public water system and the following connection types shall require review and approval by the Department prior to making the connection. Installation of a testable backflow prevention assembly or air gap [is]

1 shall be required [when] if the connection is non-potable or unapproved. Engineering plans and
2 specifications shall be submitted in accordance with Section .0300 of this Subchapter.

3 (A) Any regulated public water system;

4 (B) Any any community non-regulated public water system. Before providing a connection,
5 a supplier of water shall ensure that the construction of the non-regulated public water
6 system either was approved in accordance with Rule .0301(a) of this Subchapter or that
7 [proper] backflow prevention is provided in accordance with this Rule; [provided to
8 protect the quality of the water in the public water system;]

9 (C) Non-potable non-potable water treatment processes within a potable water treatment
10 plant; and

11 (D) All all cross-connections between potable water supplies and non-potable or unprotected
12 supplies that are not specifically addressed in this Rule or AWWA M-14 Backflow
13 Prevention and Cross Connection Control. [Control, which are considered special
14 problems for which the degree of health hazard involved shall be determined by the
15 Department.]

16 (3) Backflow Prevention Not Addressed by the Plumbing Code.

17 (A) Testable backflow prevention assemblies shall meet American Society of Sanitary
18 Engineering (ASSE) standards and carry an ASSE seal, be on the University of Southern
19 California approval list for testable backflow prevention assemblies, or be on the North
20 Carolina State Plumbing Code approval list for approved testable backflow prevention
21 assemblies.

22 (B) Each assembly [must] shall be installed in accordance with the standard AWWA C510,
23 AWWA C511, ASSE 1013, ASSE 1015, ASSE 1020, ASSE 1047, ASSE 1048, or ASSE
24 1056 applicable to the selected backflow prevention assembly, or as required by Rule
25 .0102(c)(2) of this Subchapter for an air gap.

26 (C) For each identified water treatment [process-related] process-related hazard, the supplier
27 of water shall provide the appropriate backflow prevention assembly or method to protect
28 the water supply and water treatment [employees] employees, in accordance with
29 AWWA M-14 Backflow Prevention and Cross Connection Control.

30 (D) Filling stations for special use tanks or tankers containing pesticides, fertilizers, other
31 toxic chemicals, or their residues. No person shall fill special use tanks or tankers
32 containing pesticides, fertilizers, other toxic chemicals, or their residues from a public
33 water system except at a location equipped with an over-the-rim free discharge of water
34 or a reduced pressure backflow preventer properly installed on the public water supply.
35 No supplier of water shall permit the filling of such special use tanks or tankers except at
36 locations so equipped.

- (E) A supplier of water shall not authorize for construction or other temporary, non-emergency ~~[use;]~~ use connections to hydrants that are not equipped with an approved air ~~[gap;]~~ gap or a properly installed reduced pressure principle backflow prevention assembly.
- (F) Non-potable Storage. ~~[In cases where]~~ If storage capacity is used only for non-potable purposes and there is installed either an elevated or ground tank or a ground reservoir, the following precautions shall be taken:
- (i) ~~[When]~~ If the reservoir or tank is filled from a supply other than a public water supply and the public water supply is used as a supplemental supply, the pipeline from the public water supply shall be installed with an air gap.
- (ii) ~~[When]~~ If the reservoir or tank is filled entirely by water from a public water supply and:
- (I) ~~[If]~~ a covered ground reservoir or covered elevated tank is used, an approved reduced pressure back-flow preventer or an approved double check valve assembly ~~[may]~~ shall be ~~[used;]~~ used; or
- (II) ~~[If]~~ an uncovered ground reservoir or uncovered elevated tank is used, an air gap ~~[is]~~ shall be required.
- (G) Installation.
- (i) Backflow prevention assemblies shall be installed in accordance with manufacturers' recommendations and specifications ~~[and be free from any field modifications]~~ and shall not be modified in the field.
- (ii) Back-flow prevention assemblies shall be located and installed in such a manner as to ~~[afford adequate protection;]~~ function as designed; be easily accessible for regular testing, maintenance, and inspection; and include all necessary test cocks and drains for testing. Valves shall be installed in the line at both ends of the back-flow prevention device to provide for replacement and maintenance.
- (iii) Bypass lines parallel to a backflow prevention assembly shall have an approved backflow prevention assembly installed that is equal to that on the main line.
- (iv) Reduced ~~[Pressure Principle Assemblies]~~ pressure principle assemblies shall be installed above ground or below ground in a vault with positive gravity drainage to atmosphere employing a drain of sufficient size to handle the full flow of discharge from a discharging assembly, 12-inch minimum clearance from vault walls and floor, and in accordance with ~~[manufacturers]~~ manufacturer's recommendations. A reduced pressure principle assembly may be installed as protection for either a high-health or low-health hazard.
- (v) Double ~~[Check Valve Assemblies]~~ check valve assemblies shall be installed either vertically or horizontal and above ~~[ground;]~~ ground or below ground in a

- 1 vault with positive gravity drainage to ~~the~~ atmosphere. A double check valve
2 assembly shall be installed as protection for a low-health hazard only.
- 3 (vi) Pressure ~~Vacuum Breaker Assemblies~~ vacuum breaker assemblies shall be
4 installed only where there is no ~~means or potential means~~ possibility of a
5 pressure higher than the supply pressure caused by a pump, elevated tank,
6 boiler, ~~air/steam~~ air or steam pressure, or any other means which may cause
7 backflow, and in accordance with ~~manufacturers~~ manufacturer's
8 recommendations. A pressure vacuum breaker shall be installed as protection
9 for a high-health or low-health hazard that is subject to backsiphonage ~~only~~
10 only and with no backpressure.
- 11 (4) ~~Supplier of Water Shall Authorize Connections.~~ Interconnection to a public water system ~~is~~
12 shall be subject to the approval of the supplier of water and shall not be made until authorized by
13 the supplier of water.
- 14 (5) ~~Recordkeeping.~~ A community or non-transient non-community public water system with five or
15 more testable backflow prevention assemblies protecting the distribution ~~system~~ system, as
16 required ~~under~~ pursuant to this ~~Rule~~ Rule, shall maintain the following records beginning on
17 January 1, 2020:
- 18 (A) ~~Records~~ records of the location, type, installation date, size, ~~and size~~ and the
19 associated degree of hazard of backflow prevention devices whose failure would create a
20 high-health ~~hazard~~ hazard; ~~or a low health hazard and the associated hazards;~~
- 21 (B) ~~A~~ a description of specific ongoing plans, actions, or schedules to inventory existing
22 backflow prevention devices under Part (b)(5)(A) of this Rule and to identify and address
23 ~~any~~ all uncontrolled cross-connection hazards;
- 24 (C) ~~Final~~ final results of all backflow prevention assembly field testing and air gap
25 inspections; and
- 26 (D) ~~Review~~ review of new service connections and existing service connections during a
27 change of ~~the~~ account owner to ensure ~~any~~ all required backflow prevention devices are
28 properly installed and tested.
- 29 (E) ~~A~~ a supplier of water which contracts with a third-party to implement any part of their
30 cross-connection program may allow records required by this Paragraph to be maintained
31 on the premises of the third-party, as long as the records are available on demand by the
32 supplier of water.
- 33 (F) ~~Program~~ program records under Part ~~(b)(5)~~(C) of this ~~Rule~~ Subparagraph shall be
34 maintained for a minimum of four years. Remaining records referred to in this Paragraph
35 shall be maintained while still current ~~and/or~~ or in use.
- 36 (6) ~~Reporting.~~ Each supplier of water shall notify the Department of any known incident of
37 backflow into the public water system that creates a risk of contamination as soon as ~~possible~~

1 practical upon discovery of the incident but no later than the end of the next business day. If
2 requested by the Department, the supplier of water shall submit a written report of the incident
3 describing the nature and severity of the backflow, the actions taken by the supplier of water in
4 response to the incident, and the action plan intended to prevent such incidents in the future.
5

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

7 *Eff. January 1, 1977;*

8 *Readopted Eff. December 5, 1977;*

9 *Amended Eff. April 1, 2014; September 1, 1990; December 1, 1988; June 30, ~~1980; 1980.~~*

10 *Readopted Eff. July 1, 2019.*

1 15A NCAC 18C .0408 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0408 LEAD FREE CONSTRUCTION**

4 (a) ~~Any~~ **All** pipe, pipe fitting, solder or flux used ~~after June 19, 1988~~ in the installation or repair of ~~any~~ **a** public
5 water system shall be lead free.

6 (b) "Lead free" ~~means that solders and flux shall not contain more than 0.2 percent lead, and pipes and pipe fittings~~
7 ~~shall not contain more than 8.0 percent lead.~~ means:

8 (1) not containing more than 0.2 percent lead when used with respect to solder and flux; and

9 (2) not more than a weighted average of 0.25 percent lead when used with respect to the wetted
10 surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.

11 ~~(c) This Rule shall not apply to leaded joints necessary for the repair of cast iron pipes.~~

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

14 *Eff. June 1, 1988;*

15 *Amended Eff. August 1, ~~2002~~;2002.*

16 *Readopted Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0409

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (b)(2)(A), please add a comma after "unusual events" and "line flushings"

In (b)(2)(B)(i), please change the period back to a semi-colon and "or"

In (c), what are considered to be "large vacation rental homes"?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0409 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0409 SERVICE CONNECTIONS**

4 (a) Local Water Supply Plan. Units of local government which that are operating under a local water supply plan in
5 accordance with G.S. 143-355(l) shall not be limited in the number of service connections.

6 (b) No local water supply plan. A public water system which that does not have a local water supply plan as stated
7 in Paragraph (a) shall limit its number of service connections as follows:

8 (1) A public water system shall meet the daily flow requirements specified in Table 1:

9
10 Table 1: Daily Flow Requirements

11

Type of Service Connection	Daily Flow for Design
Residential	400 gallon/connection
Mobile Home Parks	250 gallon/connection
Campgrounds and Travel Trailer Parks	100 gallon/space
Marina	10 gallon/boat slip
Marina with bathhouse	30 gallon/boat slip
Rest Homes and Nursing Homes	
with laundry	120 gallon/bed
without laundry	60 gallon/bed
Schools	15 gallon/student
Day Care Facilities	15 gallon/student
Construction, work, or summer camps	60 gallon/person
Business, office, factory (exclusive of industrial use)	
without showers	25 gallon/person/shift
with showers	35 gallon/person/shift
Hospitals	300 gallon/bed

12 or;

13 (2) A public water system ~~serving different types of service connections~~ shall meet the ~~maximum~~
14 ~~daily demand~~ daily flow requirements calculated as follows:

15 (A) Where If records of the previous year are available that reflect daily usage, the average of
16 the two highest consecutive days of record of the water treated shall be the value used to
17 determine if there is capacity to serve additional service connections (unusual
18 connections. Unusual events such as massive line breaks or line flushings shall not be
19 considered) considered.

20 (B) Where If complete daily records of water treated are not available, the public water
21 system shall multiply the daily average use based on the amount of water treated during

the previous year of record by the appropriate factor to determine maximum daily demand, as follows:

- (i) A system serving a population of 10,000 or less shall multiply the daily average use by ~~2.5~~; or 2.5.
- (ii) A system serving a population greater than 10,000 shall multiply the daily average use by 2.0.

(c) A supplier of water shall include the impact that demands from ~~any~~ anticipated in-ground irrigation systems, multi-family ~~units~~ units, or large vacation rental homes will have on the daily flow needs determined in ~~(b)~~ Paragraph (b) of this Rule.

(d) ~~Once~~ If two years of metered usage data exists, a supplier of water may recalculate the daily flow requirements based on the actual usage. If actual demands are lower than the projected demand, ~~any~~ recovered supply ~~can~~ may be used to support additional connections in accordance with Paragraph (b) of this Rule.

(e) ~~A supplier of water may use lower flows than given in Table 1 for determining the daily flow requirements for the public water system in certain instances.~~ A supplier of water shall be exempt from using Table ~~1~~, 1 in Subparagraph (b)(1) of this Rule and any other design flow standards established by the Department or the Commission to determine the daily flow requirements, provided that a professional engineer licensed pursuant to Chapter 89C of the General Statutes prepares, seals, and signs documentation supporting alternative daily flow requirements ~~which~~ that are sufficient to sustain the water usage required in the engineering design by using low-flow fixtures ~~and/or~~ or flow reduction technologies.

*History Note: Authority G.S. 130A-315; ~~103A-317~~; 130A-317; P.L. 93-523;
Eff. July 1, ~~1994~~, 1994;
Readopted Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0503

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

Please add back in "which are"

Please delete "with costs determined by the American Water Works Association" and indicate what the current, actual cost is.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0503 is adopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0503 OTHER DESIGN STANDARDS**

4 In ~~evaluation of~~ evaluating public water systems or water system design features, in addition to the Rules in this
5 Subchapter, the Department shall consider standards from the American Water Works Association or Recommended
6 Standards for Water Works – Policies for the Review and Approval of Plans and Specifications for Public Water
7 Supplies by the Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and
8 Environmental ~~Managers; Managers which are hereby~~ incorporated by reference, including any subsequent
9 amendments and editions. ~~Copies are available for public inspection as set forth in Rule .0102(a) of this Subchapter.~~
10 Copies of the American Water Works Association standards may be obtained from the American Water Works
11 Association, 6666 W. Quincy Avenue, Denver, Colorado 80235 with costs determined by the American Water
12 Works Association and available at www.awwa.org/Publications/Standards. Copies of the Recommended Standards
13 for Water Works may be obtained from the Minnesota Department of Administration available at
14 [https://www.mnbookstore.com/other/miscellaneous-state-agency-products/miscellaneous/recommended-standards-](https://www.mnbookstore.com/other/miscellaneous-state-agency-products/miscellaneous/recommended-standards-water-14349.html)
15 [water-14349.html](https://www.mnbookstore.com/other/miscellaneous-state-agency-products/miscellaneous/recommended-standards-water-14349.html) and for a cost of \$19.95. An electronic copy can be obtained at no cost from the Minnesota
16 Department of Health website, located at
17 <https://www.health.state.mn.us/communities/environment/water/tenstates/standards.html>.

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

20 *Eff. July 1, 2019 (this Rule was previously codified in 15A 18C .0715).*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0601

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (a), since you've not provided introductory language elsewhere in this Rule, please consider deleting "Pre-settling Reservoirs."

In (a), please consider formatting lines 6-7 into a list.

In (a), line 9, by "may", do you mean "shall"? If you mean may, how will you all determine whether a pre-settling reservoir will be required.

In (b), by "may approve", do you mean "shall approve" if these conditions are met?

In (c), by "may approve", do you mean "shall approve" if (c)(1) or (2) are met?

Please change the comma to a semi-colon at the end of (c)(1).

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0601 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0601 IMPOUNDMENTS: PRE-SETTLING RESERVOIRS**

4 (a) Pre-settling Reservoirs. Construction of a pre-settling reservoir shall be required [where] if wide and rapid
5 variations in turbidity, bacterial concentrations, or chemical qualities occur, or where the following raw water
6 quality standards are not met: turbidity - 150 NTU, coliform bacteria - 3000/100 ml, fecal coliform bacteria -
7 300/100 ml, or color - 75 CU. Where If impoundment of the water supply stream does not or will not provide a raw
8 water of acceptable quality, a pre-settling ~~or pre-treatment~~ reservoir located outside the watershed or catchment area
9 may be required.

10 (b) The Department may approve alternatives to pre-settling reservoirs if a supplier of water [can demonstrate]
11 demonstrates that engineered pretreatment providing an additional treatment barrier to low raw water quality will be
12 installed and that the overall designed treatment process [is capable of compliance] will comply with all other
13 applicable requirements of this Subchapter. Pilot plant studies under Rule .0714 of this Subchapter [will] shall be
14 required to demonstrate treatment effectiveness unless operational data demonstrating treatment effectiveness for the
15 variety of water quality that is experienced at the treatment facility are already available.

16 (c) The Department may approve capacity increases at existing surface water treatment facilities without addition or
17 up-sizing of pre-settling reservoirs [where] if:

- 18 (1) historical data or full-scale pilot studies [can] demonstrate that the plant [can] will provide
19 treatment in accordance with this Subchapter without additional pre-settling, or
20 (2) the use of alternative technology alleviates the need for additional pre-settling.

21
22 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*
23 *Eff. January 1, 1977;*
24 *Readopted Eff. December 5, 1977; 1977.*
25 *Readopted Eff. July 1, 2019.*
26

1 15A NCAC 18C .0703 is amended as published in 33:11 NCR 1147 as follows:

2
3 **15A NCAC 18C .0703 MECHANICAL FLOCCULATION**

4 (a) Basin Inlet and Outlet. The design of inlets and outlets of flocculation basins shall prevent short circuiting of the
5 water and destruction or deterioration of the floc.

6 (b) Detention Period. The flocculation basins shall have a theoretical detention period of not less than ~~20~~ 30 minutes.

7 (c) Agitator Control. The agitators of flocculation basins shall be equipped with variable speed controls.

8 (d) Paddles. Peripheral speed and paddle configuration shall be designed to obtain optimum velocity gradient.

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. July 1, ~~1994~~, 1994.*

14 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
15 *23, 2015;*

16 *Amended Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0706

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (b), what factors will be used in determining whether to approval a shorter period of detention? Alternatively, can you provide some examples of what "evidence" would be sufficient?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0706 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0706 SEDIMENTATION BASIN~~IN~~BASINS**

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~~ **the** minimum standard
7 unless ~~evidence, acceptable to the Division of Water Resources,~~ **evidence** is presented to support approval of a ~~lower~~
8 **shorter** period of detention.

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

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

13 (e) Overflow. Sedimentation basins shall be equipped with an overflow pipe or pipes to limit the maximum water
14 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;*

19 *Amended Eff. April 1, ~~2014~~;2014.*

20 *Readopted Eff. July 1, 2019.*

1 15A NCAC 18C .0707 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0707 SOLIDS CONTACT OR UP-FLOW UNITS**

4 (a) Approval of Solids Contact or Up-Flow Units. Solids contact or up-flow clarification units shall be approved
5 only ~~where~~ if raw water characteristics are substantially constant and shall not be approved for raw waters that have
6 wide and rapid variations in turbidity or other qualities that would adversely affect the treatment process.

7 (b) Water Rise Rate. The rise rate shall not exceed 1.0 gallon per minute per square foot of clarification area. ~~area~~
8 ~~unless the requirements of Rule .0711 of this Section have been satisfied.~~

9 (c) Weir Loading. Weir loading shall not exceed ~~seven~~ 10 gallons per minute per foot of weir length. Horizontal
10 flow to the collection trough shall not exceed 10 feet.

11 (d) Speed Agitator Equipment. Mixing and flocculation shall be accomplished by means of adjustable, variable
12 speed agitator equipment.

13 (e) Sludge Withdrawal. Sludge withdrawal equipment shall include an intermittent sludge removal mechanism
14 controlled by an adjustable automatic timer.

15 (f) Basin Drain. The basin shall be provided with a bottom drain that is of sufficient size to empty the basin in two
16 hours or less.

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;*

21 *Amended Eff. July 1, 1994; ~~1994~~.*

22 *Readopted Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0708

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

*In (a), how will the determination of whether to approve higher filtration rates be made?
What factors will be used?*

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

15A NCAC 18C .0708 is readopted as published in 33:11 NCR 1147 with changes as follows:

15A NCAC 18C .0708 GRAVITY FILTERS

(a) Filtration Rates. The standard rate of filtration for a single media filter shall be two gallons per minute per square foot. Higher filtration rates up to four gallons per minute per square foot may be approved for dual media or multi-media filters. Filtration rates in excess of four gallons per minute per square foot may be approved subject to pilot plant or plant scale demonstrations conducted in accordance with Rule .0714 of this Section.

(b) Wash Water Rate. The backwash rate of flow shall be designed to theoretically expand the filter media 50 percent.

(c) Rate Control Devices. Rate control equipment shall be provided to control or regulate the filtration rate and the backwash rate. If declining rate filtration is to be utilized, used, orifice plates shall be installed on each filter effluent pipe to control maximum filtration rates.

(d) Surface Washers. Filter beds shall be equipped with a revolving or fixed system of nozzles designed for agitation of the entire beds.

(e) Gauges and Flow Indicators. Gauges or meters shall be installed to indicate the rate of filtration, the loss of head, and the backwash rate for every filter.

(f) Filter Media:

(1) Filter Sand. Filter sand shall be clean silica sand having:

(A) an effective size of 0.35 mm to 0.55 mm, mm;

(B) a uniformity coefficient of not more than 1.70, 1.70;

(C) a dust content (passing passing 150 mesh tyler) tyler of less than 0.5 percent, percent; and

(D) a minimum depth of at least 24 inches.

(2) Anthracite Filter Media. If anthracite coal is used as a single filter media, it shall have an effective size of 0.35 mm to 0.55 mm and a uniformity coefficient of 1.70 or less. Minimum depth of the media shall be 24 inches.

(3) Dual Media or Multi-media Filters. Dual media and mixed media filter beds may have a wider range of gradation than single media beds. Particle sizes may range from 0.15 mm to 1.2 mm within the beds. Particle sizes in dual media and mixed media filter beds shall be within 0.15 mm to 1.2 mm. Influent water quality shall be considered in specifying particle sizes of mixed media beds. The minimum depth of the filter media shall be 24 inches.

(g) Supporting Media and Underdrain System. The underdrain system and layers of gravel or other media supporting the filter media shall be designed to provide uniform filtration and uniform backwash throughout the filter media.

(h) Wash Water Troughs Elevation. The elevation of the bottom of the wash water troughs for new installations shall be above the maximum level of the expanded media during washing at the normal design wash water rate. The elevation of the top of the wash water troughs shall provide a two-inch freeboard above the expanded media at the maximum rate of wash.

(i) Turbidity Monitoring. Turbidimeters employing the nephelometric method, ~~or measurement of~~ which measures the intensity of scattered light, shall be provided for the continuous determination of the turbidities of filtered water from each filter unit.

(j) Sampling Tap. A tap shall be installed for convenient sampling of the effluent from each filter.

(k) Multiple Filter Units. Two or more filter units shall be provided such that the annual average daily demand can be satisfied at the approved filtration rate with one filter removed from service.

(l) Structural Design. Filters shall have vertical walls with no protrusions or curvature. Floors of filter rooms shall be designed to prevent flooding or spillage into filters through provisions of overflow drainage and a minimum of ~~four-inch~~ four-inch curbs around the filters.

(m) Filter to Waste. All filters shall have provisions for filtering to waste with backflow prevention.

(n) Filter Backwash. Backwash capacity to ensure thorough cleaning of the filters shall be provided.

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

Eff. January 1, 1977;

Readopted December 5, 1977;

Amended Eff. July 1, 1994; January 1, 1978; 1978.

Readopted Eff. July 1, 2019.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0711

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

On line 5, what does "the following conditions shall apply" mean? If the conditions are met, will the proposed alternative system be approved"? If so, please make that more clear.

In Item (5), delete or define "consistently" and "detailed"

In Item (5), are the approval standards set forth elsewhere in rule, statute, or CFR?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0711 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0711 ALTERNATIVE FILTRATION TREATMENT TECHNOLOGIES**

4 A public water system may propose an alternative filtration treatment technology as provided in Rule .2003 of this
5 Subchapter. The following conditions shall apply:

- 6 (1) The source waters shall be derived from WS-I, ~~WS-II~~ **WS-II**, or WS-III ~~watersheds~~ **watersheds**.
7 ~~and shall be protected from sources of pollution as determined from a sanitary survey in~~
8 ~~accordance with Rule .0202 [-1305] of this Subchapter.~~
- 9 (2) The raw water quality standards and fluctuations shall be as specified in Rule .0710(6) ~~Item (6)~~ of
10 this Section, except that the following maximum concentrations shall be allowed in the influent
11 water to the water treatment plant: Turbidity - 20 NTU, coliform - 500/100 ml, fecal coliform -
12 50/100 ml, ~~and~~ color - 20 CU.
- 13 (3) Off-stream ~~pre-treatment/storage~~ **pre-treatment or storage** shall be provided as specified in Rule
14 .0710 of this ~~Section~~ **Section**, except that the raw water quality standards of Item (2) of this Rule
15 shall be maintained in the water treatment plant influent water.
- 16 (4) ~~If the Department determines that~~ the proposed water treatment plant employs treatment
17 techniques that are consistent with this Subchapter, a pilot study shall be conducted in accordance
18 with Rule .0714 of this Section.
- 19 (5) If the pilot study demonstrates ~~to the Department~~ that the proposed water treatment plant can
20 consistently produce water ~~which~~ **that** complies with all requirements of this Subchapter, detailed
21 engineering plans and specifications for the proposed plant and appurtenances shall be presented
22 to the Department for review and approval prior to construction or letting a **construction** contract.

23
24 *History Note:* Authority G.S. 130A-315; 130A-317; P.L. 93-523;
25 *Eff. July 1, 1994.*
26 *Readopted Eff. July 1, 2019.*
27

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0713

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

Please consider breaking this Rule into separate Paragraphs with line 4 being Paragraph (a) and lines 5-17 being Paragraph (b).

On line 5, do you mean "may" or do you mean something like "Pressure filters shall be approved so long as the following conditions are met:"? If so, please say that (or something like it.)

Also, please consider beginning (1) through (5) with lower case letters, end (1) through (4) with semi-colons, and add an "and" at the end of (4).

Please consider revising (1) to say "gravity filters shall meet the requirements set forth in Rule .0708 of this Section;

In (3), when would special designs or operational features be needed? Is this missing something?

In (5), delete or define "consistently" and "detailed"

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0713 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0713 PRESSURE FILTERS**

4 Pressure filters shall not be used in treatment of surface ~~waters.~~ waters without prior coagulation and flocculation.

5 Pressure filters may be approved for treatment of existing groundwater sources under the influence of surface water
6 under the following conditions:

- 7 (1) Design standards for gravity filters in Rule .0708 of this Section shall apply.
8 (2) Overall plant design shall comply with Rule .0404 of this Subchapter.
9 (3) Special design or operational features or modifications shall be provided when needed due to the
10 water quality or the design of the proposed filter.
11 (4) If the Department determines that the proposed water treatment plant employs treatment
12 techniques that are consistent with this Subchapter, a pilot plant study shall be conducted in
13 accordance with Rule .0714 of this Section.
14 (5) If the pilot study demonstrates to the Department that the proposed plant can consistently produce
15 water which that complies with all requirements of this Subchapter, detailed engineering plans and
16 specifications for the proposed plant and appurtenances shall be presented to the Department for
17 review and approval prior to construction or letting a construction contract.

18
19 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*
20 *Eff. July 1, ~~1994~~1994;*
21 *Readopted Eff. July 1, 2019.*
22

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0714

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (a), what is meant by "the proposal shall meet all of the following conditions and include all of the following information"? Is the intent here that it will be approved if (a)(1) through (5) are met? If so, please say that.

In (a)(5), what are worst case conditions? Is this a term of art?

In (b), how will it be determined whether the Department will approve the water? If it meets the water quality standards set forth in these Rules and CFRs? Please provide some additional information.

In (c), what are "worst case conditions"

Please consider putting lines 19-21 in list form and say something like the following:

- (c) ~~When~~ A model plant may be proposed without on-site testing if the proposed plant or pilot plant has met the following conditions:
- (1) been tested under worst case conditions on similar water and achieved 3.0 log removal of Giardia cysts and water;
 - (2) achieved the required log inactivation and removal under Section .2000 of this Subchapter for Giardia, Cryptosporidium, and viruses; and
 - (3) achieved and a maximum of 0.3 NTU turbidity levels 95 percent of the time in filtered effluent. effluent, the particular model plant may be proposed without on-site testing.

On line 20, did you intend on deleting "and a"

In (e), what is meant by "lead, copper, and water quality parameters"? By parameters, do you mean the CFRs and your Rules? Please clarify.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0714 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0714 PILOT PLANT STUDIES**

4 (a) A pilot plant study proposal shall be submitted to the Department for approval before the study is conducted.

5 The following conditions shall apply: The proposal shall meet all of the following conditions and include all of the
6 following information:

- 7 (1) An engineering report shall describe the proposed study and shall include the information and data
8 to justify the use of the particular plant to treat the source water; water.
- 9 (2) The proposed plant shall employ treatment techniques that are consistent with this Subchapter;
10 Subchapter.
- 11 (3) The pilot plant shall be of the same design and operation as the proposed plant; plant.
- 12 (4) A protocol for conducting the study shall be submitted which that includes the duration, testing
13 procedures, reporting procedures, plant scale scale, and other factors which that affect the
14 proposed plant operation; and operation.
- 15 (5) The study shall be conducted over a time sufficient to treat all worst-case worst-case source water
16 conditions expected through the year.

17 (b) Pilot plant finished water shall not be introduced to a public water system unless approved by the Department.

18 (c) When If the proposed plant or pilot plant has been tested under worst case conditions on similar water and
19 achieved 3.0 log removal of Giardia cysts and water; achieved the required log inactivation and removal under
20 Section .2000 of this Subchapter for Giardia, Cryptosporidium, and viruses; and achieved and a maximum of 0.3
21 NTU turbidity levels 95 percent of the time in filtered effluent, the particular model plant may be proposed without
22 on-site testing.

23 (d) The pilot plant shall comply with the provisions of Section .2000 of this Subchapter.

24 (e) If the proposal includes a change of treatment as defined in Rule .1507 of this Subchapter, the pilot study shall
25 consider the effect of the proposed changes in compliance with [on] lead, copper, and water quality [parameter
26 compliance;] parameters.

27
28 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*
29 *Eff. July 1, 1994;*
30 *Amended Eff. October 1, 2009;2009.*
31 *Readopted Eff. July 1, 2019.*
32

1 15A NCAC 18C .0715 is repealed through readoption as published in 33:11 NCR 1147 as follows:

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

4
5 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*

6 *Eff. July 1, 1994;*

7 *Amended Eff. April 1, 2014;*

8 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
9 *23, ~~2015~~, 2015;*

10 *Repealed Eff. July 1, 2019 (this rule was recodified to 15A NCAC 18C .0503).*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0803

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

Please consider breaking out the various requirements. A suggestion would be something like the following:

The total volume of a pressure tank shall be calculated by ~~using~~ **applying** the principle of Boyle's ~~Law~~ **and as set forth in this Rule. Law: The**

- (1) ~~For a mobile home park, the~~ total volume ~~(gallons) measured in gallons~~ shall be not less than 25 times the number of connections or 500 gallons, whichever is ~~greater.~~ **greater for a mobile home park. In the case of**
- (2) ~~For~~ a residential community **water system** ~~(community water system)~~ the total volume shall not be less than 40 times the number of connections or 500 gallons, whichever is greater. ~~In the case of campgrounds,~~
- (3) **For a campground,** the total volume shall not be less than 10 times the number of connections or 500 gallons, whichever is greater.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0803 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0803 CAPACITIES: DETERMINING TOTAL VOLUME**

4 The total volume of a pressure tank shall be calculated by using applying the principle of Boyle's Law. The For a
5 mobile home park, the total volume (gallons) measured in gallons shall be not less than 25 times the number of
6 connections or 500 gallons, whichever is greater. greater for a mobile home park. In the case of For a residential
7 community water system (community water system) the total volume shall not be less than 40 times the number of
8 connections or 500 gallons, whichever is greater. In the case of campgrounds, For a campground, the total volume
9 shall not be less than 10 times the number of connections or 500 gallons, whichever is greater.

10
11 *History Note:* Authority G.S. 130A-315; 130A-317; P.L. 93-523;
12 Eff. January 1, 1977;
13 Readopted Eff. December 5, 1977;
14 Amended Eff. July 1, 1994; March 31, 1980;~~1980.~~
15 Readopted Eff. July 1, 2019.

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0904

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: *This request may extend to several pages. Please be sure you have reached the end of the document.*

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (c), since you've not done it elsewhere in this Rule, please consider deleting "Special Conditions."

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .0904 is amended as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0904 PIPE LAYING**

4 (a) Trenching, pipe laying, and backfilling shall be accomplished in a manner to prevent damage to and ~~mis-~~
5 ~~alignment~~ misalignment of the pipe. Water mains shall be buried to a depth below the ~~frostline~~ frost line or to a
6 depth sufficient to provide a minimum of 30 inches cover, whichever is greater. In cases where it is impracticable to
7 provide 30 inches of cover taking into consideration feasibility and [cost to provide 30 inches of cover,] cost, a
8 deviation may be approved on a case-by-case basis, [when] if supported by data from the design engineer [including,
9 but not limited to,] including consideration of pipe material, cover material, land cover, land use, land slope, the
10 depth of the frost line, and the location of other utilities.

11 (b) To allow for construction and repair, a minimum distance of 12 inches [must] shall be maintained between the
12 outside of the water main and the outside of other utilities.

13 (c) Special Conditions. [In cases where the] If an engineer demonstrates it is impractical to maintain [a] the
14 separation distances [in] required by this [Rule when] Rule, taking into consideration [feasibility and] feasibility,
15 cost, and the factors set forth in this Paragraph, a deviation may be approved on a case-by-case basis [basis. Such
16 deviation must be] if supported by data and alternative construction criteria submitted by the design engineer. Data
17 and alternative construction criteria submitted by the design engineer to justify the deviation [must] shall [describe
18 the;] describe:

- 19 (1) the rationale for determining that separation criteria described in Paragraphs (a) and (b) of this
20 Rule are impracticable;
- 21 (2) the extent of the deviation from separation criteria in Paragraphs (a) and (b) of this Rule;
- 22 (3) a consideration of pipe materials, pressure ratings, type of joints for water main and non-potable
23 water line, and soil conditions;
- 24 (4) the ability to provide adequate work space to repair or replace pipe segments or other utility
25 infrastructure without causing damage to or otherwise compromising the integrity of pipes; and
- 26 (5) the rationale for determining that the deviation will not result in unreasonable risk to public health.

27
28 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*

29 *Eff. January 1, 1977;*

30 *Readopted Eff. December 5, 1977. 1977;*

31 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
32 *23, 2015;2015.*

33 *Amended Eff. July 1, 2019.*
34

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .0906

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (c), how is the practicability determined and by whom? Is this the same practicability standard as in (f)? If so, is it necessary to have the variance here since you already have it in (f)? Could you simply say what the requirement is and then allow for a variance under (f) if it's necessary?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 .15A NCAC 18C .0906 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .0906 RELATION OF WATER MAINS TO SEWERS NON-POTABLE WATER LINES**

4 (a) [For this rule,] For the purposes of this Rule, sewer shall mean any existing or proposed gravity or force main
5 used to convey sanitary or industrial process waste.

6 ~~(a)~~(b) Lateral Separation of Sewers and Water Mains. Water mains shall be laid at least 10 feet laterally from
7 existing or proposed sewers, unless local conditions or barriers prevent a 10-foot lateral separation—in separation, in
8 which case:

9 (1) The the water main is shall be laid in a separate trench, with the elevation of the bottom of the
10 water main at least 18 inches above the top of the sewer; or

11 (2) The the water main is shall be laid in the same trench as the sewer sewer, with the water main
12 located at one side on a bench of undisturbed earth, earth and with the elevation of the bottom of
13 the water main at least 18 inches above the top of the sewer.

14 (b) Crossing a Water Main Over a Sewer. Whenever it is necessary for a water main to cross over a sewer, the water
15 main shall be laid at such an elevation that the bottom of the water main is at least 18 inches above the top of the
16 sewer, unless local conditions or barriers prevent an 18 inch vertical separation—in which case both the water main
17 and sewer shall be constructed of ferrous materials and with joints that are equivalent to water main standards for a
18 distance of 10 feet on each side of the point of crossing.

19 (c) Crossing a Water Main Under a Sewer. Whenever it is necessary for a water main to cross under a sewer, both
20 the water main and the sewer shall be constructed of ferrous materials and with joints equivalent to water main
21 standards for a distance of 10 feet on each side of the point of crossing. A section of water main pipe shall be
22 centered at the point of crossing.

23 (c) Crossings. A [Water mains crossing sewers] water main that crosses a sewer shall be laid [to provide] a
24 minimum vertical distance of 18 inches [between] from the outside of the water main and the outside of the [sewer.
25 This shall be the case where the water main is either above or below the sewer with preference to the water main]
26 sewer, either above or below the sewer but, if practicable, the water main shall be located above the sewer. One full
27 length of water pipe shall be located so that both joints will be as far from the sewer as [possible,] practicable.

28 (d) Water Mains and Storm Sewer Pipes. Pipes carrying storm drainage shall be separated from water lines in
29 accordance with Rule .0904 of this Section.

30 (e) Water Mains and Reclaimed Water Distribution Lines. Water lines shall be located at least 10 feet horizontally
31 from [and] or at least 18 inches above water pipes carrying treated and disinfected wastewater in reclaimed water
32 distribution lines. Crossings shall be made in accordance with Paragraph (c) of this Rule.

33 (f) Special Conditions. [In cases where the] If an engineer demonstrates it is impracticable to maintain the
34 separation distances required by this Rule, taking into consideration [feasibility and] feasibility, cost, and the factors
35 set forth in this Paragraph, [to maintain the separation distances in this Rule, a] the deviation may be approved on a
36 case-by-case basis, [when] if supported by data and alternative construction criteria provided by the design engineer.

1 Data and alternative construction criteria submitted by the design engineer to justify the deviation must [describe
2 the;] describe:
3 (1) the rationale for determining that separation criteria described in this Rule are impracticable;
4 (2) the extent of the deviation from separation criteria in this Rule;
5 (3) a consideration of pipe materials, pressure ratings, type of joints for water main and non-potable
6 water line, and soil conditions;
7 (4) the ability to provide adequate work space to repair or replace pipe segments or other utility
8 infrastructure without causing damage to or otherwise compromising the integrity of pipes; and
9 (5) the rationale for determining that the deviation will not result in unreasonable risk to public health.

10
11 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*
12 *Eff. January 1, 1977;*
13 *Readopted Eff. December 5, ~~1977~~; 1977.*
14 *Readopted Eff. July 1, 2019.*
15

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .1002

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (a), has ANSI/AWWA C654-13 been incorporated by reference in accordance with 150B-21.6 elsewhere? If not, please do so here and add "is incorporated by reference, including subsequent amendments and editions" (if that's the intent.)

In (a), line 8, should "well" be "wells"?

In (b), what is an "approved laboratory"?

In (b), what is meant by "satisfactory"? As determined by whom? You all or the lab? Is the intent here that it simply meet the requirement set forth in (a)?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .1002 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .1002 DISINFECTION AND VERIFICATION OF WELLS**

- 4 (a) After water supply wells have been cleaned of foreign substances, including sediment, grease and oil, the wells
5 shall be disinfected by the addition of chlorine solution in concentrations sufficient to produce a minimum chlorine
6 residual of 100 milligrams per liter (or ppm) in the entire water column within the well casing. Water supply wells.
7 Following construction, servicing, maintenance, or any other activity or event that might lead to contamination of
8 the water, water supply wells well shall undergo disinfection and verification be disinfected in accordance with
9 ANSI/AWWA Standard C654-13, Disinfection of Wells. “Disinfection of Wells.” Copies may be obtained are
10 available for public inspection as set forth in Rule .0102(a) .0503 of this Subchapter. The disinfection
11 procedures covered are for the gravel pack, well casing, pump, and appurtenant piping.
12 (b) The chlorine solution shall remain in the well for a period of 24 hours. The well shall then be pumped until the
13 water is free of chlorine. For disinfection of existing wells following general servicing or maintenance, plans or
14 specifications do not need Departmental review or approval.
15 (c) A representative sample or samples of the water shall be collected and analyzed by a certified laboratory. The
16 absence of total coliform bacteria in addition to the documented use of proper disinfection techniques provides
17 verification that the disinfection process has been accomplished in compliance with the standard. If bacteriological
18 tests indicate verify that the water is free of bacteriological contamination, the well may be placed in service.
19 (b) After disinfection, wells shall not be placed into service until bacteriological test results of representative water
20 samples analyzed in an approved laboratory are found to be satisfactory.
21 (d) (c) Records demonstrating compliance with ANSI/AWWA Standard C654-13 shall be available for three years
22 for state inspection. inspection by the Department.

23
24 *History Note:* Authority G.S. 130A-315; 130A-317; P.L. 93-523;
25 Eff. January 1, 1977;
26 Readopted Eff. December 5, 1977;
27 Amended Eff. July 1, 1994; 1994.
28 Readopted Eff. July 1, 2019.
29

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .1003

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (a), have ANSI/AWWA C652-11 and C651-14 been incorporated by reference in accordance with 150B-21.6 elsewhere? If not, please do so here.

In (b), what is an "approved laboratory"?

In (b), what is meant by "satisfactory"? As determined by whom? You all or the lab? Is the intent here that it simply meet the requirement set forth in (a)?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .1003 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .1003 DISINFECTION AND VERIFICATION OF STORAGE TANKS AND**
4 **DISTRIBUTION SYSTEMS**

5 (a) Water distribution systems, including storage tanks and water mains, after flushing to remove sediment and other
6 foreign matter, and after testing for leaks, shall be disinfected by the addition and thorough dispersion of a chlorine
7 solution in concentrations sufficient to produce a chlorine residual of at least 50 milligrams per liter (or ppm) in the
8 water throughout the distribution system, including all water mains and storage tanks. [Distribution systems. After
9 flushing to remove sediment and other foreign matter and after checking for leaks, distribution systems] shall
10 [undergo disinfection and verification] be disinfected in accordance with ANSI/AWWA Standard C652-11:
11 “Disinfection of Water Storage Facilities” or in accordance with ANSI/AWWA [C651-14, Disinfection of Water
12 Mains, if they have been newly constructed; have been removed from service for planned repairs or for maintenance
13 that exposes them to contamination; have undergone emergency repairs because of physical failure; or under normal
14 operation, continue to show the presence of coliform bacteria.] C651-14; “Disinfection of Water Mains.” Copies
15 may be obtained [are available] for public inspection as set forth in Rule [.0102(a)] .0503 of this Subchapter.

16 (b) ~~The chlorine solution shall remain in contact with interior surfaces of the water system for a period of 24 hours.~~
17 ~~Then the water system shall be flushed with fresh water from an approved water source until the chlorine solution is~~
18 ~~dispelled. [Water storage facilities. Water storage facilities, including storage tanks and clearwells, shall undergo~~
19 ~~disinfection and verification in accordance with ANSI/AWWA Standard C652-11 if they have been newly~~
20 ~~constructed, have been entered for construction or inspection purposes, or continue to show the presence of coliform~~
21 ~~bacteria during normal operations. Copies are available for public inspection as set forth in Rule .0102(a) of this~~
22 ~~Subchapter.]~~

23 (c) ~~Representative [After disinfection under paragraphs (a) and (b) of this Rule, representative] samples of the water~~
24 ~~shall then be collected. [collected and analyzed for coliform bacteria. The absence of total coliform bacteria in~~
25 ~~addition to the documented use of proper disinfection techniques provides verification that the disinfection process~~
26 ~~has been accomplished in compliance with the standard.] If bacteriological tests of the samples indicate that the~~
27 ~~water quality is satisfactory, the water mains and storage tanks may be placed in service. [New storage tanks and~~
28 ~~distribution system water lines may be placed into service after bacteriological tests of the samples indicate that the~~
29 ~~water quality is free from contamination.]~~

30 ~~[(d) Disinfection of existing storage tanks and distribution systems following general servicing or maintenance do~~
31 ~~not require Departmental plans or specifications review or approval under Section .0300 of this Subchapter.]~~

32 (d)~~(c)~~ In unusual situations where large volume tanks are involved and where there is not sufficient water
33 available to fill the tank or there is not available a suitable drainage area for the chlorinated water, an alternate
34 disinfection procedure for tanks may be proposed. Such proposal must be submitted in writing completely
35 describing the proposed disinfection procedure and substantiating the need for an alternate procedure in the
36 particular circumstance. Such alternate procedure must be approved before being implemented. The conclusion of
37 the department ~~Department~~ shall be final.

1 (b) After disinfection, water storage or distribution facilities shall not be placed into service until bacteriological test
2 results of representative water samples analyzed in an approved laboratory are found to be satisfactory.
3 [(f)] (c) Records demonstrating compliance with ANSI/AWWA Standards [C651-14 and C652-14] C652-11 or
4 ANSI/AWWA Standard 651-14 shall be available for three years for [state inspection;] inspection by the
5 Department.

6
7 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*
8 *Eff. January 1, 1977;*
9 *Readopted Eff. December 5, 1977;*
10 *Amended Eff. January 1, 1978.*
11 *Readopted Eff. July 1, 2019.*
12

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .1004

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (b), what is an "approved laboratory"?

In (b), what is meant by "satisfactory"? As determined by whom? You all or the lab? Is the intent here that it simply meet the requirement set forth in (a)?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .1004 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .1004 DISINFECTION [AND VERIFICATION] OF FILTERS DISINFECTION OF**
4 **WATER TREATMENT FACILITIES**

5 (a) ~~After filters have been thoroughly backwashed to remove dust, silt and other foreign matter the entire filter~~
6 ~~(including filter media, supporting material and underdrain system) shall be disinfected by application of a chlorine~~
7 ~~solution having a minimum concentration of 50 milligrams per liter (or ppm).~~

8 (b) ~~The solution shall be dispersed throughout the filter bed and remain in contact for a minimum of 24 hours.~~

9 (a) New water treatment facilities and existing water treatment facilities [temporarily] taken out of service for
10 cleaning, inspection, maintenance, painting, repair, or [any] other [activity] [activities] or [event] [events] that might
11 lead to [the] contamination of water [must undergo disinfection and verification] shall be disinfected in accordance
12 with ANSI/AWWA Standard C653-13, [Disinfection] "Disinfection of Water Treatment [Plants] Facilities." [This
13 standard applies to treatment components, including filter basins, filter media, pump suction wells, and associated
14 piping and appurtenances located downstream from the filter influent or from the first point of application of
15 disinfectant in the treatment process.] Copies may be obtained [are available] for public inspection as set forth in
16 Rule [.0102(a)] .0503 of this Subchapter.

17 [(b) Filters (including filter media, supporting material and underdrain system) must be thoroughly backwashed to
18 remove dust, silt and other foreign matter from the entire filter prior to disinfection and verification.]

19 [(c) A representative sample or samples of the water shall be collected and analyzed by a certified laboratory. The
20 absence of total coliform bacteria in addition to the documented use of proper disinfection techniques provides
21 verification that the disinfection process has been accomplished in compliance with the standard. If bacteriological
22 tests verify that the water is free of bacteriological contamination, the facility may be placed in service.]

23 (e)(d) For treatment equipment that cannot tolerate chlorine, alternate disinfection procedures as recommended by
24 the equipment manufacturer may be used if equivalent to the disinfection procedure using chlorine.

25 (b) After disinfection the water treatment facilities shall not be placed into service until bacteriological test results
26 of representative water samples analyzed in an approved laboratory are found to be satisfactory.

27 [(e)] (c) Records demonstrating compliance with ANSI/AWWA Standard C653-13 shall be available for three years
28 for [state inspection.] inspection by the Department.

29
30 *History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;*

31 *Eff. January 1, 1977;*

32 *Readopted Eff. December 5, 1977;*

33 *Amended Eff. July 1, 1994; 1994.*

34 *Readopted Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .1406

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (a)(2), how is the "operational control range" established? I assume this is manufacturer/operator?

Why is (a)(4) a separate sentence? It appears to go with (a). Would it be appropriate to begin (a)(4) with a lower case letter, change the period to a semi-colon, and move your "and" to the end of (a)(3.)

In (b), what are the "necessary chemical analysis"? I assume that a certified operator is familiar with these?

Please consider revising lines 24-28 as follows: One entry point sample collected [under] pursuant to Subparagraph (c)(1) of this [Rule, [per month] Rule shall be split equally on a monthly basis. One and one portion shall be analyzed by water system personnel and the other portion analyzed by the North Carolina State Laboratory for Public Health or [other] another laboratory certified to analyze drinking water samples for fluoride by the North Carolina State Laboratory of Public Health.

For purposes of clarity, please consider revising (c)(3) as follows:

The supplier of water of [Where] a public water system that has multiple entry points [and either] that are either not all [are] fluoridated or the fluoride level at an entry point to the distribution system is not within the range set forth in [Paragraph] Subparagraph (a)(1) of this Rule [the supplier of water] shall conduct sampling as follows:

- (1) measure the fluoride concentration in the distribution system at least two times per month;*
- (2) [month. One] one sample per month shall be a split sample and analyzed in accordance with Subparagraph (c)(2) of this Rule;*
- (3) [Rule. Sample] sample sites shall be rotated throughout the distribution system at monitoring locations approved for coliform compliance sampling; and*
- (4) [sampling. These] sample results [are not required to be submitted to the Department, but must] shall be available for review by the Department upon request.*

In (c)(3), how are the locations approved for coliform compliance sampling? Is this information set forth elsewhere in CFR, rule, or statute?

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

In (e), delete “accurate”

In (e), are the contents of these forms set forth elsewhere in rule or statute? If not, please provide the substantive requirements of these forms.

Please end (h)(1) with a semi-colon.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .1406 is readopted as published in 33:11 NCR 1147 with changes as follows:

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

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

5 Fluoride Levels. ~~[To maintain as close to an optimal fluoride level of 0.7 mg/l as possible, a]~~ A supplier of water
6 ~~[which] that~~ is adding fluoride to the treated water shall maintain the following fluoride levels:

7 (1) ~~[An] an~~ operational control range for fluoride of 0.6 mg/l to 1.0 mg/l ~~[is established,]~~ shall be
8 ~~established;~~

9 (2) ~~[The] the~~ monthly average of the daily measurements at the entry point to the distribution system
10 shall be within the operational control ~~[range,]~~ range; and

11 (3) ~~[Eighty] 80~~ percent of the daily measurements at the entry point to the distribution system shall be
12 within the operational control range.

13 (4) Fluoride levels shall not exceed the MCL set forth in Rule .1510 of this Subchapter.

14 (b) A water treatment plant operator certified ~~under~~ pursuant to 15A NCAC 18D shall conduct the necessary
15 chemical analyses and supervise application of the fluoride.

16 ~~(c) Samples shall be collected and analyzed from points before and after fluoridation and from one or more points in~~
17 ~~the distribution system. The minimum number of control tests required and the number of check samples to be~~
18 ~~collected and submitted to the North Carolina State Laboratory of Public Health for analysis shall be determined by~~
19 ~~the Department in conjunction with the State Health Director, based on guidance from the Center for Disease~~
20 ~~Control, and considering recommendations from the local health department and the supplier of water.~~

21 (c) Sample Location and Frequency.

22 (1) Daily Monitoring. A supplier of water shall measure the fluoride concentration at least once per day
23 at each entry point to the distribution system with fluoridated water.

24 (2) Split Samples. One entry point sample collected ~~[under]~~ pursuant to Subparagraph (c)(1) of this
25 Rule, per month shall be split equally and one portion analyzed by water system personnel and the
26 other portion analyzed by the North Carolina State Laboratory for Public Health or ~~[other]~~ another
27 laboratory certified to analyze drinking water samples for fluoride by the North Carolina State
28 Laboratory of Public Health. A supplier of water ~~[which] that~~ has all fluoride samples under this
29 Rule analyzed by a laboratory certified to analyze drinking water samples for fluoride by the North
30 Carolina State Laboratory for Public Health ~~[is not]~~ shall not be required to conduct split sampling.

31 (3) Distribution System Monitoring. Where a public water system has multiple entry points and either
32 not all are fluoridated or the fluoride level at an entry point to the distribution system is not within
33 the range set forth in ~~[Paragraph]~~ Subparagraph (a)(1) of this Rule the supplier of water shall
34 measure the fluoride concentration in the distribution system at least two times per month. One
35 sample per month shall be a split sample and analyzed in accordance with Subparagraph (c)(2) of
36 this Rule. Sample sites shall be rotated throughout the distribution system at monitoring locations
37 approved for coliform compliance sampling. These sample results ~~[are not]~~ shall not be required to

1 be submitted to the Department, but ~~[must]~~ shall be available for review by the Department upon
2 request.

3 (4) Annual Raw Water Sample. A supplier of water shall measure the fluoride concentration of the
4 raw water at least annually by a laboratory certified to analyze fluoride in drinking water by the
5 North Carolina State Laboratory of Public Health.

6 (5) Discrepancies. A supplier of water shall compare the results of the split samples and shall consult
7 with the North Carolina State Laboratory of Public Health to investigate and resolve ~~[any~~
8 ~~discrepancy]~~ all discrepancies greater than 15 percent within 30 ~~[days:]~~ days of receipt.

9 (d) Analysis Methods. The fluoride content of ~~the~~ water shall be determined in accordance with methods set forth in
10 Rule .1508 of this Subchapter.

11 (e) Monthly Reporting. Accurate records of ~~the amount of fluoride applied to the water and the results of all~~
12 ~~fluoride analyses performed in accordance with Subparagraph (c)(1) of this Rule,~~ shall be recorded on forms
13 approved by the Department and submitted to the Department ~~weekly.~~ monthly. Fluoride results performed by
14 certified laboratories in accordance with Subparagraph (c)(1) of this Rule, shall be reported by the certified
15 laboratory electronically in a format prescribed by the Department.

16 (f) Reporting Exceedances. Any fluoride result above the MCL set forth in Rule .1510 of this Subchapter shall be
17 reported to the Department as soon as possible, but in all cases within 24 hours after receipt of the analysis.

18 ~~(f)(g)~~ Fluoride Products. Any All fluoridation ~~product~~ products used by a public water system shall meet the
19 requirements of Rule .1537 of this Subchapter.

20 (h) Discontinuation of Fluoridation. Prior to the discontinuation of fluoride addition, a supplier of water shall
21 provide to the Department and the Department of Health and Human ~~[Services]~~ Services, Oral Health ~~[Section]~~
22 Section, copies of documentation by the unit of local government or the governing body operating the community
23 water system that:

24 (1) the resolution provided in the formal application to add fluoride has been rescinded or replaced,
25 and

26 (2) the local board of health has been notified.

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

29 *Eff. February 1, 1976;*

30 *Readopted Eff. December 5, 1977;*

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

32 *Readopted Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .1507

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (a), how will it be determined whether the control and adjustment will be approved by the Department? What factors will be used in making this determination?

In (a), what is meant by "If the community water system is also required to install corrosion control treatment to comply with this Rule, it shall meet the minimum pH level required pursuant to this Rule"? It's not exactly clear to me what is being complied with nor what the "minimum pH level" is.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .1507 is readopted as published in 33:11 NCR 1147 with changes 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 6.5. This~~ control and adjustment ~~to shall~~ be approved by the Department. ~~Most waters are corrosive in~~
6 ~~varying degrees at pH 6.5 and slightly above, and such waters may have pH adjustment. If the community water~~
7 ~~system is also required to install corrosion control treatment to comply with this Rule, it shall meet the minimum pH~~
8 ~~level required [under] pursuant to this Rule.~~

9 (b) The provisions of 40 C.F.R. 141.42 are ~~hereby~~ incorporated by ~~reference reference~~ including ~~any~~ subsequent
10 amendments and editions. Copies ~~may be obtained are available for public inspection~~ as set forth in Rule ~~.0102~~
11 ~~[.0102(a) and] .0102(b)~~ of this Subchapter.

12 (c) The provisions of 40 C.F.R. 141, Subpart I - Control of Lead and Copper are ~~hereby~~ incorporated by ~~reference~~
13 ~~reference~~ including ~~any~~ subsequent amendments and editions. Copies ~~may be obtained are available for public~~
14 ~~inspection~~ as set forth in Rule ~~.0102[.0102(a) and] .0102(b)~~ of this Subchapter.

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

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

20 *Eff. September 1, 1979;*

21 *Amended Eff. October 1, 1982; February 27, 1982;*

22 *Transferred and Recodified from 10 NCAC 10D .1621 Eff. April 4, 1990; Amended Eff. April 1,*
23 *2014; July 1, 1994; October 1, 1992; December 1, 1991;1991.*

24 *Readopted Eff. July 1, 2019.*
25

1 15A NCAC 18C .1508 is amended as published in 33:11 NCR 1147 with changes 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 reference, including any subsequent
5 amendments and editions. Copies may be obtained are available for public inspection as set forth in Rule
6 .0102[.0102(a) and] .0102(b) of this Subchapter. In addition, two or more water systems that are adjacent adjacent,
7 and that are owned or operated by the same supplier of water water, and that together serve 15 or more service
8 connections or 25 or more persons shall ~~conform to the following sampling schedule: submit samples every three~~
9 years from each section of the water system that is supplied from a separate source.

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

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

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. March 1, 1989; February 1, 1987; October 1, 1986; April 1, 1983;*

19 *Transferred and Recodified from 10 NCAC 10D .1625 Eff. April 4, 1990;*

20 *Amended Eff. April 1, 2014; July 1, 1994; April 1, 1992; December 1, 1991;*

21 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
22 *23, 2015;2015.*

23 *Amended Eff. July 1, 2019.*
24

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .1509

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

Is (b) necessary? It appears to simply recite 40 CFR 141.41 (and you've already incorporated this in (a).)

If it is necessary, who are "appropriate local health officials"?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .1509 is amended as published in 33:11 NCR 1147 with changes 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 water
11 samples for sodium more frequently in locations where the sodium content is variable.

12 (b) Suppliers of water for community water systems shall report to the Department the results of the analyses for
13 sodium within the first 10 days of the month following the month in which the sample results were received or
14 within the first 10 days following the end of the required monitoring period as stipulated by the Department,
15 whichever is first. If more than annual sampling is required, the supplier shall report the average sodium
16 concentration within 10 days of the month following the month in which the analytical results of the last sample
17 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) that are hereby
22 incorporated by reference including any subsequent amendments and editions. Copies are available for public
23 inspection as set forth in Rule .0102 of this Subchapter.

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

27 (a) The provisions of 40 C.F.R. 141.41 are hereby incorporated by reference reference, including any
28 subsequent amendments and editions. Copies may be obtained are available for public inspection as set forth in
29 Rule .0102(a) and (b) of this Subchapter.

30 (b) In accordance with 40 C.F.R. 141.41(c), the supplier of water shall notify appropriate local health officials of
31 the sodium levels found in community water systems.

32
33 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;*

34 *Eff. February 27, 1982;*

35 *Transferred and Recodified from 10 NCAC 10D .1636 Eff. April 4, 1990;*

36 *Amended Eff. April 1, 2014; July 1, 1994; September 1, 1990;*

1 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
2 *23, 2015;201*
3 *Amended Eff. July 1, 2019.*
4

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .1511

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

Please consider the following revision for lines 6-9: Analysis of samples shall be made on an as needed basis determined by the ~~Department and Department. Such need basis~~ shall ~~include include, but not be limited to,~~ the addition of a new well or other raw water source, ~~an~~ approval of a new community water system, ~~an~~ approval of an existing system not previously approved, or problems and complaints of water quality normally associated with iron concentration.

On line 8, what are "problems or complaints... normally associated with iron concentration"? Is this known to your regulated public?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .1511 is amended as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .1511 CONCENTRATION OF IRON**

4 (a) The requirements of this Rule shall apply only to community water systems. A community water system which
5 that has an iron concentration in excess of 0.30 mg/l shall provide treatment to control the water quality. Analysis of
6 samples shall be made on an as needed basis determined by the Department. Such need as needed basis shall include
7 include, but not be limited to, an addition of a new well or other raw water source, an approval of a new community
8 water system, an approval of an existing system not previously approved, or problems and complaints of water
9 quality normally associated with iron concentration.

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

13
14 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;*

15 *Eff. September 1, 1979;*

16 *Transferred and Recodified from 10 NCAC 10D .1619 Eff. April 4, 1990;*

17 *Amended Eff. July 1, 1994;*

18 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
19 *23, 2015;2015.*

20 *Amended Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .1512

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

Please consider the following revision for lines 6-9: Analysis of samples shall be made on an as needed basis determined by the ~~Department and Department~~. Such need basis shall ~~include include, but not be limited to,~~ the addition of a new well or other raw water source, ~~an~~ approval of a new community water system, ~~an~~ approval of an existing system not previously approved, or problems and complaints of water quality normally associated with manganese concentration.

On line 9, what are "problems or complaints... normally associated with manganese concentration"? Is this known to your regulated public?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .1512 is amended as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .1512 CONCENTRATION OF MANGANESE**

4 (a) The requirements of this Rule shall apply only to community water systems. A community water system which
5 that has a manganese concentration in excess of 0.05 mg/l shall provide treatment to control the water quality.
6 Analysis of samples shall be made on an as needed basis determined by the Department. Such need as needed basis
7 shall include include, but not be limited to, an addition of a new well or other raw water source, an approval of a
8 new community water system, an approval of an existing system not previously approved, or problems and
9 complaints of water quality normally associated with manganese concentration.

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

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 9, 1980;*

17 *Transferred and Recodified from 10 NCAC 10D .1620 Eff. April 4, 1990;*

18 *Amended Eff. July 1, 1994;*

19 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
20 *23, ~~2015;2015.~~*

21 *Amended Eff. July 1, 2019.*
22

1 15A NCAC 18C .1515 is readopted as published in 33:11 NCR 1147 with changes 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~~ reference, including any subsequent
6 amendments and editions. Copies may be obtained ~~are available for public inspection~~ as set forth in Rule
7 .0102[.0102(a) and] .0102(b) of this Subchapter. ~~Any dates set forth in the federal rule shall be applicable.~~

8 (b) If the result of an analysis made pursuant to Paragraph (a) of this Rule indicates that the level of any
9 contaminant ~~listed in Rule .1517 of this Subchapter~~ regulated under this Subchapter exceeds the maximum
10 contaminant level, the supplier of water shall report to the Department within 48 ~~hours and initiate three additional~~
11 ~~analyses within one month.~~ hours of receipt of the analytical result.

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

14 *Eff. September 1, 1979;*

15 *Readopted Eff. <date>;*

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

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

18 *Amended Eff. April 1, 2014; August 1, 2002; April 1, 1992; December 1, 1991; September 1,*

19 *1990; 1990.*

20 *Readopted Eff. July 1, 2019.*

1 15A NCAC 18C .1516 is readopted as published in 33:11 NCR 1147 with changes as follows:

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

5 ~~(a)–~~The provisions of 40 C.F.R. 141.40 are ~~hereby~~ incorporated by reference including ~~any~~ subsequent amendments
6 and ~~editions, except that 40 C.F.R. 141.40(n)(10) is not adopted.~~ editions. Copies are available for public inspection
7 as set forth in Rule .0102[~~.0102(a) and~~ .0102(b) of this Subchapter.

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

11 ~~(c) 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; 130A-315; P.L. 93-523; 40 C.F.R. 141;*

16 *Eff. June 1, 1988;*

17 *Amended Eff. November 1, 1989;*

18 *Transferred and Recodified from 10 NCAC 10D .1638 Eff. April 4, 1990; Amended Eff. April 1,*

19 *2014; July 1, 1994; April 1, 1992; December 1, 1991; August 1, 1990;1990.*

20 *Readopted Eff. July 1, 2019.*
21

1 15A NCAC 18C .1519 is amended as published in 33:11 NCR 1147 with changes 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, systems and community adjacent water~~
5 ~~systems, as defined in G.S. 130A-315(b2). The provisions of 40 C.F.R. 141.26 are hereby incorporated by reference~~
6 ~~reference, including any subsequent amendments and editions. Copies may be obtained are available for public~~
7 ~~inspection as set forth in Rule .0102[.0102(a) and] .0102(b) of this Subchapter. Any dates set forth in the federal rule~~
8 ~~shall be applicable.~~

9 ~~(b) An adjacent water system as defined in G.S. 130A-315(b2) shall conform to the sampling schedule as set in~~
10 ~~Paragraph (c) of this rule rather than the schedule set forth in 40 C.F.R. 141.26(a) and (b).~~

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

- 13 (1) ~~gross alpha particle activity;~~
14 (2) ~~radium 226;~~
15 (3) ~~radium 228;~~
16 (4) ~~uranium; and~~
17 (5) ~~man made radioactivity from the water system.~~

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

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 shall monitor the same as~~
22 ~~required by adjacent systems in Paragraph (b) of this Rule.~~

23
24 *History Note: Authority G.S. 130A-313; 130A-315; P.L. 93-523; 40 C.F.R. 141;*
25 *Eff. September 1, 1979;*
26 *Amended Eff. March 1, 1989; September 9, 1980; December 19, 1979;*
27 *Transferred and Recodified from 10 NCAC 10D .1627 Eff. April 4, 1990;*
28 *Amended Eff. April 1, 2014; August 1, 2002; July 1, 1994;*
29 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
30 *23, 2015;2015.*
31 *Amended Eff. July 1, 2019.*
32

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .1523

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (a), delete "the Department has determined that"

In (b), since you don't have the introduction to the rest of the Paragraphs, delete "Special notifications for distribution system samples."

In (b)(1) and (2), what is "direct delivery"? Is this hand delivery?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .1523 is readopted as published in 33:11 NCR 1147 with changes 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. Copies are available for public inspection as set forth in Rule .0102 of this
7 Subchapter.

8 (b)(a) The provisions of 40 C.F.R. 141, Subpart Q – Public Notification of Drinking Water Violations are hereby
9 incorporated by reference reference, including any subsequent amendments and editions. [editions, except that under
10 40 C.F.R. 141.205(c)(2), multi-lingual notice shall be given if 30 percent] editions. As authorized by 40 C.F.R.
11 141.205(c)(2), the Department has determined that multi-lingual notice shall be given if 30 percent or more of the
12 consumers served by the system are non-English speaking. Copies may be obtained are available for public
13 inspection as set forth in Rule .0102 .0102(a) and .0102(b) of this Subchapter.

14 (c)(b) Special notification for distribution system samples. The requirements of this Paragraph shall be in addition
15 additional to the public notice requirements set forth in Paragraphs (a) and (b) Paragraph (a) of this Rule and to the
16 reporting requirements contained in Rule .1525 of this Subchapter. When If a distribution sample [which] that is
17 required to be reported to the Division is taken from the plumbing of a school or daycare, place of residence, or
18 location supplying permanent or temporary housing, the supplier of water shall notify the billing customer at the
19 sampled address is taken on property not owned or controlled by the supplier of water, the supplier of water shall
20 notify the person authorizing the sample if any individual water sample exceeds an action level, maximum
21 contaminant level, or maximum residual disinfectant level established in this Subchapter, Subchapter or if any
22 individual sample is positive for coliform bacteria, E. coli or any other fecal [indicator] indicator, as follows:

- 23 (1) For a contaminant listed as Tier 1 in Appendix A to 40 C.F.R. 141, Subpart Q, notice shall be
24 provided by telephone within 24 hours of receipt of analytical results. If the initial contact is by
25 telephone, results and shall be followed by written notice by mail or direct delivery shall also be
26 provided within 48 hours of receipt. analytical results. The written notice shall include the
27 analytical results and appropriate health effects language, language as required by Appendix B to
28 40 C.F.R. 141, Subpart Q.
- 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, language as required by Appendix B to 40 C.F.R.
33 141, Subpart Q.
- 34 (3) The supplier of water shall submit a copy of the written notice and certification of delivery to the
35 Department within 10 days of completing notification.

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

1
2
3
4
5
6
7
8

History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;
Eff. January 1, 1990;
Transferred and Recodified from 10 NCAC 10D .1642 Eff. April 4, 1990;
Amended Eff. April 1, 2014; October 1, 2006; August 1, 2002; April 1, 1992; December 1, 1991;
January 1, 1991; October 1, 1990~~1990~~.
Readopted Eff. July 1, 2019.

1 15A NCAC 18C .1524 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .1524 REPORTING FOR ORGANIC CHEMICALS REPORTING FOR**
4 **UNREGULATED CONTAMINANT MONITORING RESULTS**

5 (a) The requirements of this Rule only apply to the contaminants listed in 15A NCAC 18C .1516.

6 ~~(b) The water supplier for a community water system or non-transient, non-community water system who is~~
7 ~~required to monitor under 15A NCAC 18C .1516 shall send a copy of the results of such monitoring within 30 days~~
8 ~~of receipt and any public notice under Paragraph (d) of this Rule to the Department.~~

9 (c) The Department shall furnish the following information to the administrator for each sample analyzed:

- 10 (1) ~~Results of all analytical methods, including negatives;~~
11 (2) ~~Name and address of the system that supplied the sample;~~
12 (3) ~~Contaminants;~~
13 (4) ~~Analytical methods used;~~
14 (5) ~~Date of sample;~~
15 (6) ~~Date of analysis.~~

16 (d) ~~The water supplier shall notify persons served by the system of the availability of the results of sampling by~~
17 ~~including a notice in the first set of water bills issued after the receipt of the results, or by written or newspaper~~
18 ~~notice, within three months. The notice shall identify a person and telephone number to contact for information on~~
19 ~~the monitoring results. For surface water systems, public notice is required only after the first quarter's monitoring~~
20 ~~and shall include a statement that additional monitoring will be conducted for three more quarters with the results~~
21 ~~available upon request.~~

22 The provisions of 40 C.F.R. 141.35 are [hereby] incorporated by [reference] reference, including [any] subsequent
23 amendments and editions. Copies may be obtained [are available for public inspection] as set forth in Rule
24 [.0102(a) and] .0102(b) of this Subchapter.

25
26 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;*
27 *Eff. June 1, 1988;*
28 *Amended Eff. November 1, 1989;*
29 *Transferred and Recodified from 10 NCAC 10D .1640 Eff. April 4, 1990; 1990.*
30 *Readopted Eff. July 1, 2019.*
31

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .1525

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (b), what is meant by in a format "established by the Department"? Please say how you all require this information to be provided to you.

Also in (b), delete or define "completely"

In (b), line 15, change "fail" to "fails"

In (b), delete or define "properly" Do you mean "if a certified laboratory fails to report a compliance sample in accordance with this Paragraph..."?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .1525 is amended as published in 33:11 NCR 1147 with changes 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~~ reference, including ~~any~~ subsequent amendments and editions. Copies may be
6 obtained ~~are available for public inspection~~ as set forth in Rule ~~.0102~~ .0102(a) and .0102(b) of this Subchapter. Any
7 dates set forth in the federal rule shall be applicable.

8 (b) ~~When~~ If a certified laboratory analyzes a compliance sample for a supplier of water, the certified laboratory
9 shall report the results to both the Department and to the supplier of water or his or her designated representative
10 within the ~~required~~ periods as set forth in 40 C.F.R. ~~141.31~~ 141.31, except that electronic reporting conducted in
11 accordance with 40 C.F.R. 141.31(a) shall be completed within seven days of completion of the analysis. The
12 laboratory reporting to the Department shall include analytical results for any maximum contaminant level
13 ~~exceedence~~ exceedance within the timeframes applicable to the system owner. Reporting shall be in a format, to
14 ~~include~~ including electronic reporting, ~~provided~~ established by the Department and shall be filled out completely.
15 ~~Should~~ If a certified laboratory fail to properly report a compliance sample result, it shall be the responsibility of the
16 supplier of water ~~to~~ shall report results to the Department as required by this Rule.

17
18 *History Note: Authority G.S. 130A-315; G.S. 130A-324; G.S. 130A-329; 40 C.F.R 141;*

19 *Eff. September 1, 1979;*

20 *Amended Eff. February 1, 1987; October 1, 1984; March 31, 1981; March 31, 1980;*

21 *Transferred and Recodified from 10 NCAC 10D .1631 Eff. April 4, 1990;*

22 *Amended Eff. April 1, 2014; August 1, 2002; January 1, 1991;*

23 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
24 *23, 2015;2015.*

25 *Amended Eff. July 1, 2019.*
26

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .1527

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (a)(2), delete or define "appropriate" in "appropriate procedure." Is this dependent upon what is being tested?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

15A NCAC 18C .1527 is readopted as published in 33:11 NCR 1147 with changes as follows:

15A NCAC 18C .1527 CERTIFIED LABORATORIES

(a) ~~For the purpose of determining compliance with the requirements of this Section, samples may be considered only if they have been analyzed by a laboratory certified by the Division of Laboratory Services Laboratory Certification Branch. However, measurements for turbidity, free chlorine residual, temperature and pH may be performed by any person who has been instructed in the appropriate procedure by the Department or a certified laboratory. Measurements may also be performed by a person who holds a valid certificate issued by the North Carolina Water Treatment Facility Operators Board of Certification.~~

(b) ~~Nothing in this Section shall be construed to preclude the Department or any duly designated representative from taking samples or from using the results from such samples to determine compliance by a supplier of water with the applicable requirements of this Section.~~

(a) The provisions of 40 C.F.R. 141.28 are hereby incorporated by reference reference, including any subsequent amendments and editions, with the following exceptions:

(1) Laboratories laboratories analyzing samples under pursuant to this Subchapter must shall be certified for that analytical method by the State Laboratory of Public Health in the Department of Health and Human Services; and

(2) Measurements measurements for alkalinity; bromide; fluoride calcium; daily chlorite samples at the entrance to the distribution system; conductivity; orthophosphate; pH; residual disinfectant concentrations for chlorine, chloramines, and chlorine dioxide; magnesium; silica; Specific Ultraviolet Absorbance (SUVA); temperature; Total Organic Carbon (TOC); and turbidity may be performed by any person who holds a valid certificate issued by the North Carolina Water Treatment Facility Operators Board of Certification; Certification (NCWTFOBOC). Measurements may also be performed by a person who has been instructed in the appropriate procedure by a person who holds a valid certificate issued by the NCWTFOBOC or by any person who has been instructed in the appropriate procedure by the Department or a certified laboratory.

(b) Copies may be obtained are available for public inspection as set forth in Rule .0102(a) and .0102(b) of this Subchapter.

History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141; Eff. September 1, 1979; Amended Eff. March 31, 1981; Transferred and Recodified from 10 NCAC 10D .1629 Eff. April 4, 1990; Amended Eff. April 1, 1992; September 1, 1990; 1990. Readopted Eff. July 1, 2019.

1 15A NCAC 18C .1528 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .1528 ALTERNATE ANALYTICAL TECHNIQUES**

4 ~~With the written permission of the Secretary, concurred in by the Administrator of the U.S. Environmental~~
5 ~~Protection Agency, an alternate analytical technique may be employed. An alternate technique shall be acceptable~~
6 ~~only if it is substantially equivalent to the prescribed test in both precision and accuracy as it relates to the~~
7 ~~determination of compliance with any maximum contaminant level. The use of the alternate analytical technique~~
8 ~~shall not decrease the frequency of monitoring required by this Section.~~

9 The provisions of 40 C.F.R. 141.27 are [hereby] incorporated by [reference] reference, including [any] subsequent
10 amendments and editions. Copies may be obtained [are available for public inspection] as set forth in Rule
11 [.0102(a) and] .0102(b) of this Subchapter.

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

14 *Eff. September 1, 1979;*

15 *Amended Eff. March 31, 1981;*

16 *Transferred and Recodified from 10 NCAC 10D .1630 Eff. April 4, 1990;1990.*

17 *Readopted Eff. July 1, 2019.*

1 15A NCAC 18C .1529 is readopted as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .1529 ~~POINT-OF-ENTRY~~ POINT-OF-ENTRY, BOTTLED WATER, AND OTHER**
4 **TREATMENT DEVICES**

5 ~~(a) Public water systems may use point of entry devices to comply with maximum contaminant levels only if they~~
6 ~~meet the requirements of this Rule.~~

7 ~~(b) The water supplier shall operate and maintain the point of entry treatment system.~~

8 ~~(c) The water supplier shall develop a monitoring plan and obtain department approval of the plan before point of~~
9 ~~entry devices are installed for compliance. The approved plan shall provide health protection equivalent to central~~
10 ~~water treatment. "Equivalent" means that the water would meet all maximum contaminant levels in this Subchapter~~
11 ~~and would be of an acceptable quality similar to water distributed by a well operated central treatment plant. In~~
12 ~~addition to monitoring for volatile organic chemicals, monitoring shall include physical measurements and~~
13 ~~observations such as total flow treated and mechanical condition of the treatment equipment.~~

14 ~~(d) Effective technology shall be properly applied under a plan approved by the Department and the microbiological~~
15 ~~safety of the water must be maintained as follows:~~

16 (1) ~~Certification of performance, field testing, and, if not included in the certification process, an~~
17 ~~engineering design review of the point of entry devices shall be provided; and~~

18 (2) ~~The tendency for increase in heterotrophic bacteria concentrations in water treated with activated~~
19 ~~carbon shall be considered in the design and application of the point of entry devices. Frequent~~
20 ~~backwashing, post contactor disinfection, and Heterotrophic Plate Count monitoring shall be used~~
21 ~~when necessary to ensure that the microbiological safety of the water is not compromised.~~

22 ~~(e) Every building connected to the system shall have a point of entry device installed, maintained, and adequately~~
23 ~~monitored. The rights and responsibilities of the public water system consumer shall be conveyed with title upon~~
24 ~~sale of property.~~

25 (a) The provisions of 40 C.F.R. 141 Subpart J – Use of Non-Centralized Treatment Devices are [hereby]
26 incorporated by [reference] reference, including [any] subsequent amendments and editions. Copies may be
27 obtained [are available for public inspection] as set forth in Rule [.0102(a) and] .0102(b) of this Subchapter.

28 ~~(f)(b)~~ Public water systems shall not use bottled water or point-of-use devices to achieve compliance with a
29 maximum contaminant level. Bottled water or point-of-use devices may be used on a temporary basis to avoid an
30 unreasonable risk to health, until compliance with the maximum contaminant level is achieved.

31
32 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;*
33 *Eff. June 1, 1988;*
34 *Transferred and Recodified from 10 NCAC 10D .1641 Eff. April 4, 1990;*
35 *Amended Eff. September 1, 1990; 1990.*
36 *Readopted Eff. July 1, 2019.*
37

1 15A NCAC 18C .1532 is amended as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .1532 VARIANCES AND EXEMPTIONS**

4 The provisions of 40 C.F.R. 141.4 are ~~hereby adopted by reference in accordance with G.S. 150B-14(e).~~
5 ~~incorporated by [reference] reference,~~ including ~~[any]~~ subsequent amendments and editions. Copies ~~may be~~
6 ~~obtained [are available for public inspection]~~ as set forth in Rule ~~[.0102(a) and]~~ .0102(b) of this Subchapter.

7
8 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141;*
9 *Eff. September 1, 1979;*
10 *Transferred and Recodified from 10 NCAC 10D .1634 Eff. April 4, 1990;*
11 *Amended Eff. January 1, 1991;*
12 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
13 *23, 2015; ~~2015~~.*
14 *Amended Eff. July 1, 2019.*
15

1 15A NCAC 18C .1535 is amended as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .1535 MAXIMUM CONTAMINANT LEVELS FOR COLIFORM BACTERIA**

4 (a) The provisions of 40 C.F.R. 141.63 are hereby adopted by reference in accordance with G.S. 150B-14(e).
5 incorporated by [reference] reference, including [any] subsequent amendments and editions. Copies may be
6 obtained [are available for public inspection] as set forth in Rule [.0102 (a) and] .0102(b) of this Subchapter.

7 (b) The provisions of 40 C.F.R. 141.52 are hereby adopted by reference in accordance with G.S. 150B-14(e).
8 incorporated by [reference] reference, including [any] subsequent amendments and editions. Copies may be
9 obtained [are available for public inspection] as set forth in Rule [.0102 (a) and] .0102(b) of this Subchapter.

10
11 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141.52; 40 C.F.R. 141.63;*

12 *Eff. January 1, 1991;*

13 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
14 *23, 2015;2015.*

15 *Amended Eff. July 1, 2019.*

1 15A NCAC 18C .1537 is amended as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .1537 DRINKING WATER ~~ADDITIVES~~ TREATMENT CHEMICALS AND SYSTEM**
4 **COMPONENTS**

5 (a) The standards ~~set forth in~~ [by] established by the American National Standards Institute/NSF International,
6 codified ~~at~~ as ANSI/NSF Standard 60 and ANSI/NSF Standard 61, are hereby incorporated by reference including
7 any subsequent amendments and editions. ANSI/NSF Standard 60 applies to drinking water treatment chemicals.
8 ANSI/NSF Standard 61 applies to drinking water system components. Copies may be obtained are available for
9 public inspection as set forth in Rule ~~.0102~~ [.0102(a)] .0503 of this Subchapter.

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

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

18 (d) A supplier of water shall not introduce or permit the introduction of a water supply product into a public water
19 system which that does not meet the requirements of this Rule.

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

22 *Eff. July 1, 1994;*

23 *Amended Eff. April 1, 2014;*

24 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff.*

25 *November 23, 2015; ~~2015~~.*

26 *Amended Eff. July 1, 2019.*

1 15A NCAC 18C .1538 is amended as published in 33:11 NCR 1147 with changes 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 reference, including any subsequent amendments and editions. Copies may be obtained are available for
6 public inspection as set forth in Rule .0102[.0102(a) and] .0102(b) of this Subchapter.

7 (b) ~~Travel trailer parks, campgrounds, and marina slips that are community water systems as defined by G.S. 130A-~~
8 ~~313(10), but do not serve 25 or more of the same persons more than six months per year shall be exempt from the~~
9 ~~provisions of this Rule.~~

10
11 *History Note: Authority G.S. 130A-313; 130A-315; P.L. 93-523; 40 C.F.R. 141;*

12 *Eff. August 1, 2000;*

13 *Amended Eff. April 1, 2014;*

14 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
15 *23, 2015;2015.*

16 *Amended Eff. July 1, 2019.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .1804

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: This request may extend to several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

In (b), delete or define "effectively"

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .1804 is amended as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .1804 NOTICE**

4 (a) A local approval program shall submit an annual notice to the ~~Department~~ [to identify] of ~~Department.~~
5 identifying each approval of ~~the~~ construction or alteration of the distribution system of a community water system.
6 The local approval program shall retain a copy of the application and approved engineering [plans.] plans and shall
7 provide a copy to the Department upon request. The notice shall consist of one copy of the application with
8 construction plans, any revisions made to the plans and the final approval letter.

9 (b) The local approval program shall provide notice to the department within 10 days of any change in staff, budget
10 budget, or other resources which that may affect the program's ability to effectively carry out the plan review
11 program.

12 (c) Upon completion of the construction or alteration of the distribution system, the applicant shall submit a
13 statement to the local approval program program, signed by a registered professional engineer engineer, stating that
14 construction was completed in ~~substantial~~ accordance with approved plans and specifications and revised only in
15 accordance with 15A NCAC 18C .0306 of this Subchapter. The statement shall be based upon adequate
16 observations during and upon completion of construction by the engineer or a representative of the engineer's office
17 who is supervised by the engineer. The local approval program shall provide a copy of the statement to the
18 ~~Department.~~ Department upon request.

19
20 *History Note: Authority G.S. 130A-317; 1985 S.L., c. 697, s. 3;*

21 *Eff. January 1, 1986;*

22 *Amended Eff. December 1, 1988;*

23 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
24 *23, 2015;2015.*

25 *Amended Eff. July 1, 2019.*
26

1 15A NCAC 18C .2001 is amended as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .2001 GENERAL REQUIREMENTS**

4 The provisions of 40 C.F.R. 141.70 are hereby adopted by reference in accordance with G.S. 150B-14(e).
5 incorporated by [reference] reference, including [any] subsequent amendments and editions. Copies may be
6 obtained [are available for public inspection] as set forth in Rule [.0102(a) and] .0102(b) of this Subchapter.

7
8 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141.70;*
9 *Eff. January 1, 1991;*
10 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
11 *23, ~~2015;2015.~~*
12 *Amended Eff. July 1, 2019.*
13

REQUEST FOR TECHNICAL CHANGE

AGENCY: Commission for Public Health

RULE CITATION: 15A NCAC 18C .2002

DEADLINE FOR RECEIPT: Tuesday, June 11, 2019

PLEASE NOTE: *This request may extend to several pages. Please be sure you have reached the end of the document.*

The Rules Review Commission staff has completed its review of this Rule prior to the Commission's next meeting. The Commission has not yet reviewed this Rule and therefore there has not been a determination as to whether the Rule will be approved. You may call our office to inquire concerning the staff recommendation.

In reviewing this Rule, the staff recommends that the following technical changes be made:

On line 4, please change "adopted" to "incorporated" and delete "in accordance with G.S. 150B-21.6"

On line 6, please format the change as "~~.0102~~ .0102(b)"

Please tab Items (1), (2), (3), and (4).

Is the intent of (3) and (4) to be an exception to the CFR or are these setting forth other requirements? I read them to be the latter. If that's correct, please consider making these and the incorporation exceptions separate Paragraphs, and make the specific exceptions Subparagraphs (a)(1) and (2).

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Amber May
Commission Counsel
Date submitted to agency: Tuesday, May 28, 2019

1 15A NCAC 18C .2002 is amended as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .2002 DISINFECTION**

4 The provisions of 40 C.F.R. 141.72 are hereby adopted by reference reference, in accordance with G.S. 150B-21.6
5 including subsequent amendments and editions. Copies may be obtained ~~are available for public inspection~~ as set
6 forth in Rule .0102(b) of this Subchapter. These provisions are adopted with the following exceptions:

7 (1) Water entering the distribution system. In 40 C.F.R. 141.72 (a)(2), (a)(3), and (b)(2), "0.2 mg/l" of residual
8 disinfectant concentration shall be replaced with "0.2 mg/l measured as free chlorine when chlorine is the singular
9 only applied disinfectant and 1.0 mg/l measured as total chlorine when ammonia and chlorine are applied

10 disinfectants."

11 (2) Water in the distribution system at coliform sampling sites. In 40 C.F.R. 141.72(a)(4) and (b)(3), "undetectable"
12 shall be replaced with "less than 0.2 mg/l measured as free chlorine when chlorine is the singular only applied
13 disinfectant and less than 1.0 mg/l measured as total chlorine when ammonia and chlorine are applied disinfectants."

14 (3) Water in the distribution system at maximum residence time sites. For samples collected at maximum residence
15 time sites or at other locations with high water age as required by Rule .1302(a)(2) of this Subchapter, residual
16 disinfectant concentrations shall be at detectable levels as set forth and calculated in 40 C.F.R. 141.72(a)(4) and
17 (b)(3).

18 (4) All surface water treatment facilities shall include chemical disinfection for a minimum 0.5 log Giardia
19 inactivation.

20
21 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141.72;*

22 *Eff. January 1, 1991;*

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

24 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
25 *23, ~~2015;2015.~~*

26 *Amended Eff. July 1, 2019.*

1 15A NCAC 18C .2005 is amended as published in 33:11 NCR 1147 with changes as follows:

2
3 **15A NCAC 18C .2005 CRITERIA FOR AVOIDING FILTRATION**

4 The provisions of 40 C.F.R. 141.71 are hereby adopted by reference in accordance with G.S. 150B-14(e).
5 incorporated by [reference] reference, including [any] subsequent amendments and editions. Copies may be
6 obtained [are available for public inspection] as set forth in Rule [.0102(a) and] .0102(b) of this Subchapter.

7
8 *History Note: Authority G.S. 130A-315; P.L. 93-523; 40 C.F.R. 141.71;*

9 *Eff. January 1, 1991;*

10 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
11 *23, 2015;2015.*

12 *Amended Eff. July 1, 2019.*

1 15A NCAC 18C .2008 is amended as published in 33:11 NCR 1147 with changes 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 reference, including any subsequent
5 amendments and editions. Copies may be obtained are available for public inspection as set forth in Rule
6 ~~.0102[.0102(a) and]~~ .0102(b) of this Subchapter.

7 (b) The provisions of 40 C.F.R. 141.54 are hereby incorporated by reference reference, including any subsequent
8 amendments and editions. Copies may be obtained are available for public inspection as set forth in Rule
9 ~~.0102[.0102(a) and]~~ .0102(b) of this Subchapter.

10 (c) The provisions of 40 C.F.R. 141.64 are hereby incorporated by reference reference, including any subsequent
11 amendments and editions. Copies may be obtained are available for public inspection as set forth in Rule
12 ~~.0102[.0102(a) and]~~ .0102(b) of this Subchapter.

13 (d) The provisions of 40 C.F.R. 141.65 are hereby incorporated by reference reference, including any subsequent
14 amendments and editions. Copies may be obtained are available for public inspection as set forth in Rule
15 ~~.0102[.0102(a) and]~~ .0102(b) of this Subchapter.

16 (e) The provisions of 40 C.F.R. 141, Subpart L- Disinfectant Residuals, Disinfection Byproducts, and Disinfection
17 Byproduct Precursors, and the provisions of 40 C.F.R. 141, Subparts U-Initial Distribution System Evaluations and
18 Subpart V - Stage 2 Disinfection Byproducts Requirements are hereby incorporated by reference reference,
19 including any subsequent amendments and editions. Copies may be obtained are available for public inspection as
20 set forth in Rule ~~.0102[.0102(a) and]~~ .0102(b) of this Subchapter.

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

24
25 *History Note: Authority G.S. 130A-313; 130A-315; P.L. 93-525; 40 C.F.R. 141;*

26 *Eff. August 1, 2000;*

27 *Amended Eff. April 1, 2014; October 1, 2009; August 1, 2002;*

28 *Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November*
29 *23, ~~2015;2015.~~*

30 *Amended Eff. July 1, 2019.*