AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0106

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

On line 4, what is meant by "as used herein"? Do you mean in this Subchapter?

Do you need "unless the context otherwise requires"? I understand that G.S. 143-215.21 uses this language, but do you need it here.

Are these definitions in addition to those set forth in G.S. 143-215.21? If so, please consider saying something like "In addition to the definitions set forth in G.S. 143-215.21, the following definitions shall apply to this Subchapter:"

| 1 | 15A NCAC 021 | E .0106 is readopted as published in 35:21 NCR 2350 as follows: |
|----|-----------------|--|
| 2 | | |
| 3 | 15A NCAC 02 | E .0106 DEFINITIONS |
| 4 | As used herein, | unless the context otherwise requires: |
| 5 | (1) | "Director" means the Director of the Division of Water Resources |
| 6 | (2) | "Division" means the Division of Water Resources. |
| 7 | | |
| 8 | History Note: | Authority G.S. 87-87; 143-215.14; 143-215.21; |
| 9 | | Eff. March 1, 1985; |
| LO | | Amended Eff. August 1, 2002; |
| 11 | | Readonted Eff. January 1, 2022 |

2 1 of 1

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0107

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

In (b), who may the Director delegate to? I assume another employee within the Department given the language in G.S. 143-215.3(a)(4)? Please clarify.

1 15A NCAC 02E .0107 is readopted as published in 35:21 NCR 2350 as follows: 2 3 15A NCAC 02E .0107 DELEGATION 4 (a) The Director is delegated the authority to grant, modify, revoke or deny permits under G.S. 143-215.15 and G.S. 5 143-215.16. 6 (b) The Director may delegate any permitting function given by the Rules of this Subchapter. 7 (c) The Director is delegated the authority to assess civil penalties and request the Attorney General to institute civil 8 actions under G.S. 143-215.17. 9 (d) The Director is delegated the authority to process applications and collect fees for registration of water 10 withdrawals and transfers under G.S. 143-215.22H and G.S. 143-215.3(a)(1b). 11 (e) The Director may delegate any water withdrawal or transfer registration processing functions given by the Rules 12 of this Subchapter. 13 14 History Note: Filed as a Temporary Amendment Eff. October 14, 1991 for a Period of 180 Days to Expire on 15 April 11, 1992; 16 Authority G.S. 143-215.3(a)(1); 143-215.3(a)(4); 17 Eff. March 1, 1985; 18 Amended Eff. August 1, 2002; September 1, 1994; April 1, 1992;

4 1 of 1

Readopted Eff. January 1, 2022.

19

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0301

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

In (a), are the substantive requirements of the application form set forth elsewhere in rule or statute? Are the contents covered by G.S. 143-215.22H(a)? If not, please provide them here.

In (a), is the Division's address set forth elsewhere in Rule? If so, please delete "The mailing address shall be provided by [the] Division..." If it is not, please provide the address.

In (d), please add a comma after "no fees"

In (d), what is considered to be "a timely manner"?

In (d), please delete or define "directly" and "incidental." Is it sufficient to say "whose activities are related to the production of crops, fruits, vegetables..."

In (d), what is meant by "activities" in "whose activities are..." I assume that this is referring to activities that require registration under G.S. 143-215.22H? G.S. 143-215.3 says "no fee may be charged under this provision, however, to a farmer who submits an application that pertains to his farming operations." Please confirm that the language of (d) is consistent with the statute

15A NCAC 02E .0301 is readopted with changes as published in 35:21 NCR 2351-2352 as follows:

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15A NCAC 02E .0301 APPLICATION; PROCESSING FEES

- 4 (a) Any person subject to G.S. 143-215.22H, shall complete, sign, and submit an application for registration, on a
- 5 form provided by the Department, to the Director of the Division of Water Resources. The registration application
- and registration processing fee as set forth in Paragraph (b) of this Rule (if applicable) shall be mailed to the Division
- 7 of Water Resources, North Carolina Department of Environment, Health, and Natural Resources, Post Office Box
- 8 27687, Raleigh, North Carolina 27611-7687 Environmental [Quality,] Quality. The mailing address shall be provided
- 9 by Division of Water Resources.
- (b) Except as otherwise provided in this Rule, a non-refundable registration processing fee in the amount of fifty
 dollars (\$50.00) shall be paid when the registration application form is submitted.
 - (1) No registration application form is complete until the registration processing fee is paid.
 - (2) Each facility from which a person withdraws or transfers one million gallons per day or more must be separately registered. The registration application for each facility to be registered must include the fee in the amount set forth in this Rule.
 - (3)(2) A late registration fee in the amount of five dollars (\$5.00) per day for each day the registration of a water transfer or withdrawal is late, up to a maximum of five hundred dollars (\$500.00), shall be assessed as a penalty for failure to register the water transfer or withdrawal in a timely manner. The penalty <u>pursuant to G.S. 143-215.22H(e)</u> shall stop stops accruing on the date of receipt of the completed registration application by the Division of Water Resources.
 - (4)(3) Payment of the registration processing fee may be by check or money order made payable to the "N. C. Department of Environment, Health, and Natural Resources." "N. C. Department of Environmental Quality." The check or money order shall refer to the water withdrawal or transfer registration application.
 - (c) Except as otherwise provided in this Rule, upon receipt of a properly completed application form and the registration processing fee, the applicant shall be issued a receipt of registration.
 - (d) Pursuant to G.S. 143-215.3(a)(la), and G.S. 143-215.22H, no fees including late registration fees for failing to register or update registrations in a timely manner, are required to be paid under this Rule by a farmer who submits an application for or an update of a registration of a withdrawal or transfer that pertains to farming operations. Upon receipt of a properly completed application from a farmer, the applicant will be issued a receipt of registration. whose activities are directly related or incidental to the production of crops, fruits, vegetables, ornamental and flowering plants, dairy products, livestock, poultry, and other agricultural products, or to the creation or maintenance of waterfowl impoundments.
- (e) Pursuant to G.S. 143-215.22H(c), separate registration of a water withdrawal or transfer is not required of a local
 government that completes and periodically revises and updates its water supply plan pursuant to G.S. 143-355(l).
- 36 (f) Any person who withdraws or transfers one million gallons or more in any single day must register the withdrawal
 37 or transfer.

6 1 of 2

| 1 | | |
|---|---------------|---|
| 2 | History Note: | Filed as a Temporary Rule Eff. October 14, 1991 for a Period of 180 Days to Expire on April 11, |
| 3 | | 1992; |
| 4 | | Authority G.S. 143-215.3(a)(1a); 143-215.3(a)(1b); 143-215.22H; 143-355(1); |
| 5 | | Eff. April 1, 1992; |
| 6 | | Amended Eff. September 1, 1994; |
| 7 | | Readopted Eff. January 1, 2022. |
| 8 | | |

2 of 2 7

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0501

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

What is the purpose of lines 22-25? What directives does it provide to your regulated public? Given the language in G.S. 143-215.13, do you need this language? If so, please say who shall do what.

1 15A NCAC 02E .0501 is readopted as published in 35:21 NCR 2350 as follows: 2 3 15A NCAC 02E .0501 DECLARATION AND DELINEATION OF CENTRAL COASTAL PLAIN 4 **CAPACITY USE AREA** 5 The area encompassed by the following 15 North Carolina counties and adjoining creeks, streams, and rivers is hereby 6 declared and delineated as the Central Coastal Plain Capacity Use Area: 7 (1) **Beaufort** 8 **(2)** Carteret 9 **(3)** Craven 10 <u>(4)</u> **Duplin** 11 <u>(5)</u> **Edgecombe** 12 <u>(6)</u> Greene 13 <u>(7)</u> <u>Jones</u> 14 **(8)** Lenoir 15 <u>(9)</u> Martin <u>(10)</u> Onslow 16 17 <u>(11)</u> **Pamlico** 18 (12)Pitt 19 <u>(13)</u> Washington 20 <u>(14)</u> Wayne; and 21 (15)Wilson. 22 The Environmental Management Commission finds that the The use of ground water requires coordination and limited 23 regulation in this delineated area for protection of the public interest. The intent of this Section is to protect the long-24 term productivity of aquifers within the designated area and to allow the use of ground water for beneficial uses at 25 rates which do not exceed or threaten to exceed the recharge rate of the aquifers within the designated area. 26 27 History Note: Authority G.S. 143-215.13; 28 Eff. August 1, 2002; 29 Readopted Eff. January 1, 2022.

1 of 1

9

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0502

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

Just to be clear, is the intent of (a) to say that those Areas set forth in .0501 are not required to obtain the permit set forth in this Rule?

In (d)(2) and (d)(4), how is the Director to determine whether a piece of information is critical?

In (d)(4), please add a comma after "pits"

In (d)(4))(B), please add a comma after design" and "drains"

In (h) and (i), please add a comma after "pits"

In (i), please change "Rule .0502(c) of this Section" to "Paragraph (c) of this Rule."

In (j), does "adversely affected" have the same meaning as "adverse impact" as defined in Paragraph (c)? If so, please use consistent terminology. If not, what is meant by "adversely affected"?

In (h), do you still need lines 12-13? If so, what is meant by "the effective date of this Rule"?

What is the intent of (k)?

Delete the "and" at the end of (n)(1).

Please change the commas in (n)(1) and (2) to semi-colons.

In (n)(3), please change the "which" to "that" on line 7.

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: December 1, 2021

| 1 | 15A NCAC 02E .0502 is readopted with changes as published in 35:21 NCR 2350 as follows: |
|----|--|
| 2 | |
| 3 | 15A NCAC 02E .0502 WITHDRAWAL PERMITS |
| 4 | (a) Existing ground water withdrawal permits issued in Capacity Use Area No. 1 (15A NCAC 02E .0200) within the |
| 5 | Central Coastal Plain Capacity Use Area are reissued under Section .0500 of this Subchapter and are valid until the |
| 6 | expiration date specified in each permit. Water use permits are no longer required for withdrawals in Hyde and Tyrrel |
| 7 | Counties as of the effective date of this Rule. Permits are not required for surface water use under Section .0500 or |
| 8 | this Subchapter in the Central Coastal Plain Capacity Use Area as delineated in Rule .0501 of this Section. |
| 9 | (b) No person shall withdraw ground water after the effective date of this Rule in excess of 100,000 gallons per day |
| 10 | by a well, group of wells operated as a system, or sump for any purpose unless such person shall first obtain he or she |
| 11 | obtains a water use permit from the Director. Existing withdrawals of ground water as of the effective date of this |
| 12 | Rule and proposed withdrawals previously approved for funding appropriated pursuant to the "Clean Water and |
| 13 | Natural Gas Critical Needs Bond Act of 1998" or other local, state or federally funded projects as of the effective date |
| 14 | of this Rule shall be allowed to proceed with construction or to continue to operate under interim status until a permi |
| 15 | has been issued or denied by the Director, provided that persons withdrawing in excess of 100,000 gallons per day by |
| 16 | a well, group of wells operated as a system, or sump comply with the following requirements: |
| 17 | (1) Persons conducting withdrawals in the Capacity Use Area that require a permit shall submit a permi |
| 18 | application to the Division of Water Resources within 180 days of the effective date of this Rule. |
| 19 | (2) Persons who have submitted applications shall provide any additional information requested by the |
| 20 | Division of Water Resources for processing of the permit application within 30 days of the receip |
| 21 | of that request. |
| 22 | (3) Persons conducting withdrawals in the Capacity Use Area that require a permit shall submit water |
| 23 | level and water use data on a form supplied by the Division four times a year, within 30 days of the |
| 24 | end of March, June, September, and December until a permit has been issued or denied by the |
| 25 | Division of Water Resources. |
| 26 | (c) [No ground water withdrawal shall result in adverse impacts, including dewatering of aquifers, encroachment o |
| 27 | salt water, land subsidence or sinkhole development, or decline in aquifer water levels that indicate aggregate water |
| 28 | use exceeds the aquifer recharge rate.] Ground water withdrawals shall be governed by the following standards: |
| 29 | (1) Adverse impacts of ground water withdrawals shall be avoided or minimized. Adverse impacts |
| 30 | include, but are not limited to: |
| 31 | (A) dewatering of aquifers; |
| 32 | (B) encroachment of salt water; |
| 33 | (C) land subsidence or sinkhole development; or |
| 34 | (D) declines in aquifer water levels that indicate that aggregate water use exceeds the aquife |
| 35 | replenishment rate. |
| 36 | (2) Adverse impacts on other water users from ground water withdrawals shall be corrected or |
| 37 | minimized through efficient use of water and development of sustainable water sources. |

| 1 | (3) | in determining the importance and necessity of a proposed withdrawal the efficiency of water use | | | | | | |
|----|---------------------|--|--|--|--|--|--|--|
| 2 | | and implementation of conservation measures shall be considered. | | | | | | |
| 3 | (d) An applicat | ion for a water use permit must be submitted on a form approved by the Director to the North Carolina | | | | | | |
| 4 | Division of Wa | ter Resources. The application shall describe the purpose or purposes for which water shall be used, | | | | | | |
| 5 | shall set forth the | he method and location of withdrawals, shall justify the quantities needed, and shall document water | | | | | | |
| 6 | conservation m | conservation measures to be used by the applicant to ensure efficient use of water and avoidance of waste. Any other | | | | | | |
| 7 | information neo | cessary to determine whether to grant or deny an application as requested by the Division shall be | | | | | | |
| 8 | submitted to the | e Division within 30 days of the request. Withdrawal permit applications shall include the following | | | | | | |
| 9 | information: | | | | | | | |
| 10 | (1) | location Location by latitude and longitude of all wells to be used for withdrawal of water and all | | | | | | |
| 11 | | other wells within 1500 feet of the applicant's wells; | | | | | | |
| 12 | (2) | specifications Specifications for design and construction of existing and proposed production and | | | | | | |
| 13 | | monitoring wells including well diameter, total depth of well, depths of all open hole or screened | | | | | | |
| 14 | | intervals that will yield water to the well, depth of pump intake(s), size, capacity, and type of pump, | | | | | | |
| 15 | | depth to gravel pack, and depth measurements shall be within accuracy limits of plus or minus 0.10 | | | | | | |
| 16 | | feet and referenced to a known land surface elevation; | | | | | | |
| 17 | | (A) Well diameter; | | | | | | |
| 18 | | (B) Total depth of the well; | | | | | | |
| 19 | | (C) Depths of all open hole or screened intervals that will yield water to the well; | | | | | | |
| 20 | | (D) Depth of pump intake(s); | | | | | | |
| 21 | | (E) Size, capacity and type of pump; | | | | | | |
| 22 | | (F) Depth to top of gravel pack; and | | | | | | |
| 23 | | (G) Depth measurements shall be within accuracy limits of plus or minus 0.10 feet and | | | | | | |
| 24 | | referenced to a known land surface elevation. | | | | | | |
| 25 | | Exceptions may be made where specific items of information are not critical, as determined by the | | | | | | |
| 26 | | Director, to manage the ground water resource; | | | | | | |
| 27 | (3) | withdrawal Withdrawal permit applications for use of ground water from the Cretaceous aquifer | | | | | | |
| 28 | | system shall be reviewed protecting [recognizing] the Cretaceous aquifer system zonesinclude | | | | | | |
| 29 | | plans to reduce water use from these aquifers as specified in Rule .0503 of this Section. Withdrawal | | | | | | |
| 30 | | rates from the Cretaceous aquifer system that exceed the approved base rate may be permitted during | | | | | | |
| 31 | | Phase I of Rule .0503 of this Section if the applicant can demonstrate to the Director's satisfaction a | | | | | | |
| 32 | | need for the greater amount. Cretaceous aquifer system wells shall be identified using the | | | | | | |
| 33 | | specifications in Rule .0502(d)(1) and .0502(d)(2) of this Section and the hydrogeological | | | | | | |
| 34 | | framework; | | | | | | |
| 35 | (4) | withdrawal Withdrawal permit applications for dewatering of mines, pits or quarries shall include a | | | | | | |
| 36 | | dewatering or depressurization plan that includes: | | | | | | |
| 37 | | (A) the current withdrawal rate or estimates of the proposed withdrawal rate; | | | | | | |

| 1 | | (B) | the loc | ation, design and specifications of any sumps, drains or other withdrawal sources |
|----|-----|----------------|--------------------|---|
| 2 | | | includi | ng wells and trenches; |
| 3 | | (C) | the late | eral extent and depth of the zone(s) to be dewatered or depressurized; |
| 4 | | (D) | locatio | n by latitude and longitude of all wells within 1500 feet of the excavation boundary; |
| 5 | | <u>(E) (D)</u> | a moni | itoring plan that provides data to delineate the nature and extent of dewatering or |
| 6 | | | depres | surization; and |
| 7 | | <u>(F)(E)</u> | certific | eation of all engineering plans and hydrogeological analyses prepared to meet these |
| 8 | | | require | ements consistent with professional licensing board statutes and rules governing such |
| 9 | | | activiti | es. |
| 10 | | Excepti | ons may | be made where specific items of information are not critical, as determined by the |
| 11 | | Directo | r, to mar | nage the ground water resource; and |
| 12 | (5) | conserv | ation m | easures. the The applicant shall provide information on existing conservation |
| 13 | | measure | es and co | onservation measures to be implemented during the permit period as follows: |
| 14 | | (A) | Public | water supply systems shall develop and implement a feasible water conservation |
| 15 | | | plan in | corporating, at a minimum, the following components. Each component shall be |
| 16 | | | describ | bed, including a timetable for implementing each component that does not already |
| 17 | | | exist. | |
| 18 | | | (i) | adoption Adoption of a water conservation-based rate structure, such as: flat rates, |
| 19 | | | | increasing block rates, seasonal rates, or quantity-based surcharges; surcharges. |
| 20 | | | (ii) | implementation Implementation of a water loss reduction program if unaccounted |
| 21 | | | | for water is greater than 15 percent of the total amount produced, as documented |
| 22 | | | | annually using a detailed water audit. Water loss reduction programs shall consist |
| 23 | | | | of annual water audits, in-field leak detection, and leak repair; repair. |
| 24 | | | (iii) | adoption Adoption of a water conservation ordinance for irrigation, including |
| 25 | | | | such measures as: as time-of-day and day-of-week restrictions on lawn and |
| 26 | | | | ornamental irrigation, irrigation or automatic irrigation system shut-off devices; |
| 27 | | | | or other appropriate measures. |
| 28 | | | (iv) | implementation Implementation of a retrofit program that makes available indoor |
| 29 | | | | water conservation devices to customers, such (such as showerheads, toilet |
| 30 | | | | flappers, and faucet aerators; aerators). |
| 31 | | | (v) | implementation Implementation of a public education program, such (such as |
| 32 | | | | water bill inserts, school and civic presentations, water treatment plant tours, and |
| 33 | | | | public services announcements; and announcements, or other appropriate |
| 34 | | | | measures). |
| 35 | | | (vi) | evaluation Evaluation of the feasibility of water reuse as a means of conservation, |
| 36 | | | | where applicable. |

| I | | (B) (| Jsers of | t water for commercial purposes, other than irrigation of crops and forestry stock, |
|----|------------------|--------------------------|----------------------|--|
| 2 | | S | hall dev | velop and implement a water conservation plan as follows: |
| 3 | | (| i) | an audit of water use by type of activity, such as process make up water and non- |
| 4 | | | | contact cooling water, activity (for example, process make up water, non-contact |
| 5 | | | | cooling water) including existing and potential conservation and reuse measures |
| 6 | | | | for each type of water use; and |
| 7 | | (| ii) | an implementation schedule for feasible measures identified in the above item for |
| 8 | | | | conservation and reuse of water at the facility. |
| 9 | | (C) U | Jsers o | f water for irrigation of crops and forestry stock shall provide the following |
| 10 | | i | nformat | tion: |
| 11 | | (| i) | total acreage with irrigation available; |
| 12 | | (| ii) | types of crops that may be irrigated; |
| 13 | | (| iii) | method of irrigation such as (for example, wells that supply water to canals, |
| 14 | | | | ditches or central pivot systems or any other irrigation method using ground |
| 15 | | | | water); and |
| 16 | | (| iv) | a statement that the applicant uses conservation practice standards for irrigation |
| 17 | | | | as defined by the Natural Resources Conservation Service. |
| 18 | (6) | <u>if</u> If an a | pplicant | t intends to operate an aquifer storage and recovery program (ASR), the applicant |
| 19 | | shall prov | ide info | rmation on the storage zone, including the depth interval of the storage zone, lateral |
| 20 | | extent of | the proj | ected storage area, construction details of wells used for injection and withdrawal |
| 21 | | of water, | and per | formance of the ASR program. |
| 22 | (e) The Directo | or shall issu | e, modi | fy, revoke, or deny each permit as set forth in G.S. 143 215.15. Permittees may |
| 23 | apply for permi | it modificati | ons. A | ny application submitted by a permittee shall be subject to the public notice and |
| 24 | comment requir | rements of G | S.S. 143 | -215.15(d). |
| 25 | (f) Permit durat | tion shall be | set by tl | ne Director as described in G.S. 143-215.16(a). Permit transferability is established |
| 26 | in G.S. 143 215 | 5.16(b). | | |
| 27 | (e) (g) Persons | holding a pe | ermit sh | all submit signed water usage and water level reports to the Director not later than |
| 28 | 30 days after th | e end of eacl | h permi | t reporting period as specified in the permit. Monitoring report requirements shall |
| 29 | may include: | | | |
| 30 | (1) | amounts + | Amount | s of daily withdrawal from each well; well. |
| 31 | (2) | pumping | Pumpin | g and static water levels for each supply well as measured with a steel or electric |
| 32 | | tape, or a | n altern | ative method as specified in the permit, at time intervals specified in the permit; |
| 33 | | permit. | | |
| 34 | (3) | static Stat | ie watei | r levels in observation wells at time intervals specified in the permit: |
| 35 | (4) | annual A | nnual sa | ampling by applicants located in the salt water encroachment zone and chloride |
| 36 | | concentra | tion ana | alysis by a State certified laboratory; and laboratory. |

| 1 | (5) <u>any Any</u> other information the Director determines to be pertinent and necessary to the evaluat | ion |
|----|--|-----------------|
| 2 | of the effects of withdrawals during the application review process. | |
| 3 | (f) (h) Water use permit holders shall not add new wells without prior approval from the Director through a permit holders. | <u>mit</u> |
| 4 | modification. | |
| 5 | (g) (i) The Director may require permit holders to construct observation wells to observe water level and water qual | ity |
| 6 | conditions before and after water withdrawals begin if there are concerns about adverse impacts to the aquifer base | <u>sed</u> |
| 7 | on the withdrawal amount and location. there is a demonstrated need for aquifer Aquifer monitoring may be necessary | <u>ary</u> |
| 8 | to assess the impact of the withdrawal on the aquifer. | |
| 9 | (h) (j) For all water uses other than dewatering of mines, pits or quarries, withdrawals shall be permitted only from | om |
| 10 | wells that are constructed such that the pump intake or intakes are at a shallower depth than the top of the upperm | ost |
| 11 | confined aquifer that yields water to the well. Confined aquifer tops are established in the hydrogeological framework | rk. |
| 12 | Where wells in existence as of the effective date of this Rule are not in compliance with the requirements of t | his |
| 13 | provision, the permit shall include a compliance schedule for retrofitting or replacement of non-compliant we | lls. |
| 14 | Withdrawals from unconfined aquifers shall not lower the water table by an amount large enough to decrease | the |
| 15 | effective thickness of the unconfined aquifer by more than 50 percent. | |
| 16 | (i) (k) For withdrawals to dewater mines, pits or quarries, the permit shall delimit the extent of the area and depths | of |
| 17 | the aquifer(s) to be dewatered or depressurized. Maximum withdrawal rates and the permissible extent of dewater | ing |
| 18 | or depressurization shall be determined by the Director using data provided by the applicant, data related to perm | iits |
| 19 | under G.S. <u>74-50</u> <u>74-47</u> , and other publicly available information. Withdrawal rates that do not cause adverse impact | ets, |
| 20 | as defined in Rule .0502(c) of this Section, shall be approved. | |
| 21 | (j) (l) Withdrawals of water that cause changes in water quality such that the available uses of the resource | are |
| 22 | adversely affected, by dewatering or salt water encroachment, shall not be permitted. For example, withdrawals shall not be permitted. | all |
| 23 | not be permitted that result in migration of ground water that contains more than 250 milligrams per liter chloride in | nto |
| 24 | pumping wells that contain chloride at concentrations below 250 milligrams per liter. | |
| 25 | (k) (m) General permits may be developed by the Division and issued by the Director for categories of withdraw | val |
| 26 | that involve the same or substantially similar operations, have similar withdrawal characteristics, require the sa | me |
| 27 | limitations or operating conditions, and require similar monitoring. | |
| 28 | (1) (n) Permitted water users may withdraw and sell or transfer water to other users provided that their permit | ted |
| 29 | withdrawal limits are not exceeded. | |
| 30 | (m) (o) A permitted water user may sell or transfer to other users a portion of his permitted withdrawal. To carry | out |
| 31 | such a transfer, the original permittee must request a permit modification to reduce his permitted withdrawal and | the |
| 32 | proposed recipient of the transfer must apply for a new or amended withdrawal permit. permit under Section .0500 | ⊢ of |
| 33 | this Subchapter. | |
| 34 | (n) (p) The Director shall issue a temporary permit when the following conditions are met: | |
| 35 | (1) Where an applicant or a permit holder can demonstrate demonstrates that compliance with wa | ter |
| 36 | withdrawal limits established <u>pursuant to this Section under Section</u> .0500 of this Subchapter is | not |

| 1 | pos | sible because of construction schedules, requirements of other laws, or other reasons beyond the |
|----|-----------------|---|
| 2 | con | trol of the applicant or permit holder; holder, and where |
| 3 | (2) the a | applicant or permit holder has made good faith efforts to conserve water and to plan the development |
| 4 | of (| other water sources, and sources, the Director may issue a temporary permit with an alternative |
| 5 | scho | edule to attain compliance with provisions of Section .0500 of this Subchapter, as authorized in G.S. |
| 6 | 143 | -215.15(e)(ii). |
| 7 | (3) the | applicant or permit holder provides data from monitoring wells which support a higher withdrawal |
| 8 | <u>rate</u> | which does not exceed the recharge rate. |
| 9 | | |
| 10 | History Note: | Authority G.S. 143-215.14; 143-215.15; 143-215.16; |
| 11 | | Eff. August 1, 2002; |
| 12 | | Readopted Eff. January 1, 2022. |

16 6 of 6

| 1 | 15A NCAC 02E | .0503 is | repealed through r | eadoption a | as publ | ished in 35:21 NC | R 23: | 50 as follows: | |
|---|---------------|----------|---------------------|-------------|---------|-------------------|-------|----------------|---------|
| 2 | | | | | | | | | |
| 3 | 15A NCAC 02E | E .0503 | PRESCRIBED | WATER | USE | REDUCTIONS | IN | CRETACEOUS | AQUIFER |
| 4 | | | ZONES | | | | | | |
| 5 | | | | | | | | | |
| 6 | History Note: | Authori | ity G.S. 143-215.15 | 5; | | | | | |
| 7 | | Eff. Aug | gust 1, 2002; | | | | | | |
| 8 | | Reneal | ed Eff January 1 | 2022 | | | | | |

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0504

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

In (a), please add a comma after "metering equipment"

In (a)(1), what water use would subject the person to these Rules? Please provide a cross-reference.

In (a)(3), please change "and/or" back to "or" or "and", whichever you mean.

In (a)(3), what is considered to be "nearby"?

In (a)(3), what are "adverse impacts"? Is a definition set forth elsewhere in rule or statute? Is this a term or art?

In (b), please delete the "or" after "the requirements of these Rules,"

In (b), how will the Division determine whether something is confidential business information? What factors will be used? I see that G.S. 143-215.19(e) allows for this designation "Upon a contention by any person that records, reports or information or any particular part thereof to which the Commission has access under this section, if made public would divulge methods or processes entitled to protection as trade secrets or would divulge confidential information concerning business activities, the Commission shall consider the material referred to as confidential..." So, given that language, do you need (b)? If so, could you instead reference the statute since it appears to provide the requirements for something to be considered confidential business information.

| 1 | 15A NCAC 02E | 0.0504 is readopted as published in 35:21 NCR 2350 as follows: |
|----|------------------|--|
| 2 | | |
| 3 | 15A NCAC 021 | 2.0504 REQUIREMENTS FOR ENTRY AND INSPECTION |
| 4 | (a) The Division | on may enter and inspect property in order to evaluate wells, pumps, metering equipment or other |
| 5 | withdrawal or n | neasurement devices and records of water withdrawals and water levels, if: |
| 6 | (1) | Persons conduct an activity that the Division believes requires the use of water at quantities that |
| 7 | | subject the person subject to regulation under these Rules; |
| 8 | (2) | A permittee or applicant has not provided data or information on use of water and wells and other |
| 9 | | water withdrawal facilities as required by these Rules; or |
| 10 | (3) | Water levels and chloride concentrations at the person's facility, or at nearby facilities and/or or |
| 11 | | monitoring stations, indicate that aquifers may be damaged by overpumping, overpumping or salt |
| 12 | | water encroachment, or other adverse impacts affects that may be attributed to withdrawal by the |
| 13 | | person. |
| 14 | (b) All informa | tion submitted to fulfill the requirements of these Rules, or to obtain a permit under these Rules, or |
| 15 | obtained by insp | pection under these Rules, shall be treated as Confidential Business Information, if requested by the |
| 16 | applicant, and f | ound to be such by the Division. Reports defined in Rule .0502(e) .0502(g) of this Section are not |
| 17 | considered Con | idential Business Information. |
| 18 | | |
| 19 | History Note: | Authority G.S. 143-215.19; |
| 20 | | Eff. August 1, 2002; |
| 21 | | Readopted Eff. January 1, 2022. |
| | | |

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0505

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

In (a), are the substantive requirements of this form set forth elsewhere in rule or statute? Are these the requirements of 143-355(k)? If so, please delete G.S. 143-355(k) from the History Note as this is authority for the Department, as opposed to EMC, and provide the cross-reference to the statute in the Rule to show what the substantive requirements of the form are. If that's an incorrect understanding, please provide the substantive requirements of the form in rule.

Just to be clear, is the form referenced on line 7 different than the form referenced on line 12 in (a)(2)?

In (b), please change "do not" to "shall not"

| 15A NCAC 02H | 2.0505 is readopted as published in 35:21 NCR 2350 as follows: |
|-------------------|--|
| | |
| 15A NCAC 021 | E.0505 ACCEPTABLE WITHDRAWAL METHODS THAT DO NOT REQUIRE A |
| | PERMIT |
| (a) As of the eff | ective date of this Rule, any Any person who is not subject to Rule .0502 of this Section and withdraws |
| more than 10,00 | 00 gallons per day from surface or ground water in the Central Coastal Plain Capacity Use Area, shall |
| register such wi | thdrawals on a form supplied by the Division and comply with the following provisions: |
| (1) | construct Construct new wells such that the pump intake or intakes are above the top of the |
| | uppermost confined aquifer that yields water to the well. Confined aquifer tops are established in |
| | the hydrogeological framework; |
| (2) | report Report surface and ground water use to the Division of Water Resources on an annual basis |
| | on a form supplied by the Division; and |
| (3) | withdraw Withdraw water in a manner that does not damage the aquifer, aquifer or cause salt water |
| | encroachment, encroachment- or other adverse impacts. |
| (b) Requireme | nts of this Rule These requirements do not apply to withdrawals to supply an individual domestic |
| dwelling. | |
| (c) Agricultura | I water users may either register water use with the Division of Water Resources as provided in this |
| Rule or provide | the information to the North Carolina Department of Agriculture and Consumer Services. |
| | |
| History Note: | Authority G.S. 143-215.14; 143-355(k); |
| | Eff. August 1, 2002; |
| | Readopted Eff. January 1, 2022. |
| | (a) As of the effection more than 10,000 register such with (1) (2) (3) (b) Requirement dwelling. (c) Agricultural Rule or provide |

1 of 1 21

| 1 | 15A NCAC 02E | 2.0506 is repealed through readoption as published in 35:21 NCR 2350 as follows: |
|---|---------------|--|
| 2 | | |
| 3 | 15A NCAC 02I | E .0506 CENTRAL COASTAL PLAIN CAPACITY USE AREA STATUS REPORT |
| 4 | | |
| 5 | History Note: | Authority G.S. 143-215.14; |
| 6 | | Eff. August 1, 2002; |
| 7 | | Repealed Eff. January 1, 2022. |

22 1 of 1

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0507

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

In Item (6), please add a comma after "Upper Cape Fear"

In Item (7), please add a comma after "dewatering"

What is the purpose of lines 33 on page 1 through line 2 on page 2? This language does not appear to meet the definition of a Rule. Keeping in mind that Rules cannot be retroactive, what directive does language provide to your regulated public? Please review and revise as necessary.

In Item (13), what sort of applicant supplied information? Is this information required? Is this provided elsewhere in rule or statute?

15A NCAC 02E .0507 is readopted with changes as published in 35:21 NCR 2350 as follows:

15A NCAC 02E .0507 DEFINITIONS

The following is a list of definitions for terms found in Section .0500 of this Subchapter:

- (1) Approved base rate: The larger of a person's January 1, 1997 through December 31, 1997 or August 1, 1999 through July 31, 2000 annual water use rate from the Cretaceous aquifer system, or an adjusted water use rate determined by through negotiation with the Division based upon documentation of the following information: using documentation provided by the applicant of:
 - (a) water use reductions made since January 1, 1992;
 - (b) use of wells for which funding has been approved or for which plans have been approved by the Division of Environmental Health Department of Environmental Quality by the effective date of this Rule August 1, 2002;
 - (c) the portion of a plant nursery operation using low volume micro-irrigation; or
 - (d) other relevant information pertaining to water use during the time periods specified.
- (2) Aquifer: Water-bearing earth materials that are capable of yielding water in usable quantities to a well or spring.
- (3) Aquifer recharge: Precipitation that infiltrates into the subsurface. The addition of water to the zone of saturation.
- (4) (3) Aquifer storage and recovery program (ASR): Controlled injection of water into an aquifer with the intent to store water in the aquifer for subsequent withdrawal and use.
- (5) (4) Confining unit: A geologic formation that does not yield <u>usable economically practical</u> quantities of water to wells or springs. Confining units separate aquifers and slow the movement of ground water.
- (6) (5) Cretaceous aquifer system: A system of aquifers in the North Carolina coastal plain that is comprised of water-bearing earth materials deposited during the Cretaceous period of geologic time. The extent of the Cretaceous Aquifer System is defined in the hydrogeological framework and includes the Peedee, Black Creek, Upper Cape Fear and Lower Cape Fear aquifers.
- (7) Cretaceous aquifer system zones: Regions established in the fresh water portion of the Cretaceous aquifer system that delimit zones of salt water encroachment, dewatering and declining water levels.

 These zones are designated on the paper and digital map entitled "Central Coastal Plain Capacity Use Area Cretaceous Aquifer Zones" (CCPCUA) on file in the Office of the Secretary of State.

 These zones encompass areas sensitive to over-development because aquifer withdrawal rates can exceed recharge rates. Between August 1, 2002 and July 31, 2019 Cretaceous Aquifer system zone users were required to reduce withdrawals from their Approved Base Rates up to 30% in the declining water level zone and up to 75% in the dewatering and salt water encroachment zones. The reductions came about through large investments by water users in alternative water sources and

| water treatment systems. Intermittent users were not required to reduce withdrawals. Users of wells |
|--|
| exclusively screened or open to the Peedee aquifer were not required to reduce withdrawals. |
| (8) (6) Dewatering: Dewatering occurs when aquifer water levels are depressed below the top of a confined |
| aquifer or water table declines adversely impact affect the resource. |
| (9) (7) Flat rates: Unit price remains the same regardless of usage within customer class. |
| (10) (8) Fresh water: Water containing chloride concentrations equal to or less than 250 milligrams per liter. |
| (11) (9) Gravel pack: Sand or gravel sized material inside the well bore and outside the well screen and |
| casing. |
| (12) (10) Ground water: Water in pore spaces or void spaces of subsurface sediments or consolidated rock. |
| (13) (11) Hydrogeological framework: A three-dimensional representation of aquifers and confining units |
| that is stored in Division data bases and may be adjusted by applicant supplied information. |
| (14) (12) Increasing block rates: Unit price increases with additional usage. |
| (15) (13) Intermittent users: Persons who withdraw ground water less than 60 days per calendar year [and] |
| or who withdraw less than 15 million gallons of ground water in a calendar year; or aquaculture |
| operations registered by the Board of Agriculture in accordance with G.S. 106-761 licensed under |
| the authority of G.S. 106-761 using water for the initial filling of ponds or refilling of ponds no more |
| frequently than every five years. |
| (16) (14) Observation well: A non-pumping well screened in a particular aquifer where water levels can be |
| measured and water samples can be obtained. |
| (17) (15) Pumping water level: The depth to ground water in a pumping well as measured from a known |
| land surface elevation. Measurements shall be made four hours after pumping begins. |
| Measurements shall be within accuracy limits of plus or minus 0.10 feet. |
| (18) (16) Quantity based surcharges: Surcharges billed with usage over a certain determined quantity. |
| (19) (17) Recharge rate: The rate of which water replenishes an aquifer. [Recharge rates for the Cretaceous |
| aquifer system vary depending on the thickness and hydraulic conductivity of the overlying |
| sedimentary layers. A best fit line through water levels from the Division operated monitoring wells |
| over a given time interval will show if withdrawals exceed, are less than, or are equal to the aquifer |
| recharge rate.] |
| (20)-(17) Salt water: Water containing chloride concentrations equal to and in excess of 250 milligrams per |
| liter. |
| (21) (18) Salt water encroachment: The lateral or vertical migration of salt water toward areas occupied by |
| fresh water. This may occur in aquifers due to natural or man-made causes. |
| (22) (19) Seasonal rates: Unit <u>price changes</u> prices change according to the season. |
| (23) (20) Static water level: The depth to ground water in a non-pumping well as measured from a known |
| land surface elevation. Measurements shall be made after pumping has ceased for 12 hours. |
| failed surface elevation. We assurements shall be made after pumping has ecased for 12 hours. |
| |

| 1 | <u>(24)</u> (2 | 1) Unaccounted for water: The difference between the total water entering the system, including |
|---|---------------------------|---|
| 2 | | produced and purchased, system (produced and purchased) and the total metered or otherwise |
| 3 | | accounted for water usage. |
| 4 | <u>(25)</u> (2 | 2) Water table: The water level in an unconfined aquifer. |
| 5 | | |
| 6 | History Note: | Authority G.S. 143-215.14; |
| 7 | | Eff. August 1, 2002; |
| 8 | | Readopted Eff. January 1, 2022. |

26 3 of 3

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0601

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

Is this Rule necessary? If so, what directives is it conveying upon your regulated public? If you need it, please consider revising to say who shall do what.

| 1 | 15A NCAC 021 | E .0601 is readopted as published in 35:21 NCR 2359 as follows: |
|----|-----------------|--|
| 2 | | |
| 3 | 15A NCAC 02 | E .0601 SCOPE |
| 4 | The purpose of | this Section is to minimize harmful impacts of drought and water supply emergencies on public health |
| 5 | and safety, env | ironmental quality, and the economy by establishing minimum standards and practices for water |
| 6 | shortage respon | se planning, water use reporting, water conservation, and water reuse during droughts and water supply |
| 7 | emergencies. | |
| 8 | | |
| 9 | History Note: | Authority G.S. 143-354(a)(1); 143-354(a)(8); S.L. 2002-167; |
| 10 | | Eff. March 19, 2007; |
| 11 | | Readopted Eff. January 1, 2022. |

28 1 of 1

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0602

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

On line 4, please change the comma to a colon at the end of "Section"

In Item (3), please add a comma after "environmental" and "Extreme Drought"? Are these designations within the discretion of the NCDMAC through the Department?

In Item (4), please delete "successful in"

In Item (5), please delete or define "maximum" and "minimum"

In Item (7), please add a comma after "health", "state", and "safety"

In Item (8), determined by whom?

In Item (10), delete or define "routine", "complex", and "quality"

In Item (10), please add a comma after "output"

In Item (10), what are the "industry regulations"?

In Item (14), do you need "usually"?

In Item (16), please add a comma after "reduce plant tissue temperatures"

| I | 15A NCAC 02E | .0602 is readopted as published in 35:21 NCR 2359 as follows: |
|----|----------------------------|--|
| 2 | | |
| 3 | 15A NCAC 02E | .0602 DEFINITIONS |
| 4 | The following de | finitions shall apply for the purposes of this Section, |
| 5 | (9) (1) | "Council" and "NCDMAC" mean the North Carolina Drought Management Advisory Council. |
| 6 | (8) (2) | "Department" means the North Carolina Department of Environment and Natural Resources |
| 7 | | (DENR). Environmental Quality (DEQ). |
| 8 | (10) (3) ' | 'Drought Advisory" means an advisory issued by the NCDMAC that delineates the geographic extent |
| 9 | | and severity of a water deficit significant enough to have social, environmental or economic effects. |
| 10 | | Drought Advisories shall be designated as Abnormally Dry, Moderate Drought, Severe Drought, |
| 11 | | Extreme Drought and Exceptional Drought to indicate the severity of conditions from least to most |
| 12 | | severe, respectively. |
| 13 | <u>(4)</u> | "Effective" means successful in producing the desired or intended result. |
| 14 | <u>(5)</u> | "Efficient" achieving maximum productivity with minimum wasted effort or expense. |
| 15 | <u>(6)</u> | "Efficient use" is reducing water wastage by measuring the amount of water required for a particular |
| 16 | | purpose and the amount of water used or delivered. |
| 17 | (4) (7) | "Essential water use" means the use of water necessary for fire fighting, health and safety purposes; |
| 18 | | water needed to sustain human and animal life; and water necessary to satisfy federal, state and local |
| 19 | | public health, safety or environmental protection requirements. |
| 20 | <u>(8)</u> | "Industry Best Management Practices" are methods that have been determined to be the most |
| 21 | | effective and practical means of completing a task. |
| 22 | <u>(9)</u> | "Industry Standards" are a set of criteria within an industry relating to the standard functioning and |
| 23 | | carrying out of operations in their respective fields of production. |
| 24 | <u>(10)</u> | "Normal Operating Procedures (NOPs)" is a set of step-by-step instructions compiled by an |
| 25 | | organization to help workers carry out complex routine operations. NOPs aim to achieve efficiency, |
| 26 | | quality output and uniformity of performance, while reducing miscommunication and failure to |
| 27 | | comply with industry regulations. |
| 28 | (5) (11) | "Non-essential water use" means categories of water use, other than essential water use, that may |
| 29 | | be curtailed during droughts and water emergencies. |
| 30 | (2) (12) | "Person" means any individual, corporation, company, association, partnership, unit of local |
| 31 | | government, state agency, federal agency, or other legal entity. |
| 32 | <u>(13)</u> | "Privately owned" are water systems that can be for-profit systems managed by investors or |
| 33 | | shareholders. |
| 34 | <u>(14)</u> | "Publicly owned" are water systems that are usually non-profit entities managed by local or state |
| 35 | | governments, for which rates are set by a governing board. |
| 36 | (6) <u>(15)</u> | "State agencies" includes all agencies of the executive branch of the government of North Carolina, |
| 37 | | the General Assembly, the General Court of Justice, and the University of North Carolina. |

30 1 of 2

| 1 | (11) (16) | "Syringing" means the application of a small volume of water, usually 0.10 inch or less of water, |
|----|----------------------|--|
| 2 | | near midday to correct plant water deficits, reduce plant tissue temperatures and reduce the heat |
| 3 | | stress on turfgrass plants. |
| 4 | (7) (17) | "Unit of local government" means a county, city, town, incorporated village, consolidated city- |
| 5 | | county, sanitary district or other local political subdivision, or authority or agency of local |
| 6 | | government. |
| 7 | (1) (18) | "Water" means any waters of the State located on or below the land surface as well as water |
| 8 | | contained within a water treatment and distribution system. |
| 9 | (3) (19) | "Water delivery system" means any open or closed conveyance system used to move water for |
| 10 | | potable or non-potable purposes from its point of origin to a point of use, including: municipal water |
| 11 | | systems; residential, commercial, industrial, and commercial plumbing systems; irrigation systems; |
| 12 | | water using equipment; and flexible hoses. |
| 13 | | |
| 14 | History Note: | Authority G.S. 143-354(a)(8); S.L. 2002-167; |
| 15 | | Eff. March 19, 2007; |
| 16 | | Readopted Eff. January 1, 2022. |

2 of 2 31

| 1 | 15A NCAC 02E | E .0603 is | s readopted as published in 35:21 NCR 2360 as follows: |
|----|--|------------|--|
| 2 | | | |
| 3 | 15A NCAC 021 | E .0603 | GENERAL INFORMATION |
| 4 | (a) The provision | ons of thi | is Section apply to the following classes of water users: |
| 5 | (1) | Public | ly owned and privately owned water supply systems; |
| 6 | (2) | State a | gencies; |
| 7 | (3) | Units o | of local government; |
| 8 | (4) | Busine | ess and industrial water users; and |
| 9 | (5) | Agricu | ultural and horticultural water users. |
| 10 | (b) This Section | on does | not prevent owners and operators of a water delivery system or other persons from |
| 11 | developing, implementing and requiring water use measures in response to droughts or emergency water shortage | | |
| 12 | that are more re | strictive | than the specified response measures in Rules .0612 through .0614. |
| 13 | (b) All owners | and ope | erators of a water delivery system may develop, implement, and require more stringent |
| 14 | standards than t | hose set | forth in Rules .0612 through .0614 of this Section in response to droughts or emergency |
| 15 | water shortages. | <u> </u> | |
| 16 | (c) All establish | hed and | new uses of reclaimed water, consistent with the provisions of 15A NCAC 02H .0200 02U |
| 17 | .0100 and any successive rules and amendments that define and the use of reclaimed water, as administered by the | | |
| 18 | Department's Di | vision of | f Water ResourcesQuality, shall be exempt from the requirements set forth in this Section. |
| 19 | | | |
| 20 | History Note: | Author | rity S.L. 2002-167; |
| 21 | | Eff. Mo | arch 19, 2007; |
| 22 | | Reado | nted Eff January 1, 2022 |

32 1 of 1

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0604

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

In (1)(d) and (e), please add a comma after "commercial"

In Item (3), how are they to submit this electronically? Do they have a portal of sorts or is there a general website?

| 1 | 15A NCAC 02 | E .0604 i | s readopted as published in 35:21 NCR 2360 as follows: |
|----|-----------------|------------|--|
| 2 | | | |
| 3 | 15A NCAC 02 | E .0604 | ANNUAL REPORTING OF WATER USE DATA |
| 4 | In order to imp | prove the | availability of data for the development of the State water supply plan to be used when |
| 5 | managing wate | er resourc | es during drought and water supply emergencies and to provide a basis for evaluating the |
| 6 | effectiveness o | of emerge | ency water conservation measures, the following data reporting requirements have been |
| 7 | established: | | |
| 8 | (1) | Water | systems that are required to prepare a Local Water Supply Plan under G.S. 143-355(l) shall, |
| 9 | | irrespe | ective of the issuance of a drought advisory, annually report to the Department the following |
| 10 | | inform | nation: |
| 11 | | (a) | Water system identification information; |
| 12 | | (b) | Annual average daily water use (total amount of surface and ground water withdrawn as |
| 13 | | | well as water supplied by another system) by the water system, in million gallons per day |
| 14 | | | (MGD); |
| 15 | | (c) | The average daily water use (total amount of surface and ground water withdrawn as well |
| 16 | | | as water supplied by another system) for each month of the prior calendar year, in million |
| 17 | | | gallons per day (MGD); |
| 18 | | (d) | The number of connections for residential, industrial, commercial and institutional metered |
| 19 | | | and non-metered water use, as of December 31st of the reporting year; |
| 20 | | (e) | The annual average daily water use in million gallons per day (MGD) categorized by |
| 21 | | | residential, industrial, commercial, institutional water uses and sales to other systems to the |
| 22 | | | extent that this information by category is available; and |
| 23 | | (f) | Water used by the system, in addition to the amount delivered to customers, to meet water |
| 24 | | | treatment and distribution requirements, in million gallons per day (MGD). |
| 25 | (2) | All pe | rsons that are required to register water withdrawals and transfers under G.S. 143-215.22H, |
| 26 | | who a | re not subject to Item (1) of this Rule, shall annually report to the Department monthly average |
| 27 | | water | use in million gallons per day (MGD) for each month. The following information shall be |
| 28 | | report | ed: |
| 29 | | (a) | Owner and facility identification information; |
| 30 | | (b) | Sources of water withdrawn; |
| 31 | | (c) | Number of days water was withdrawn for each month; and |
| 32 | | (d) | Average daily withdrawal for the actual number of days water was withdrawn each month, |

an inability to submit data electronically may submit data in writing on a form supplied by the Department.

Data shall be submitted electronically. Water users that exhibit to the Division of Water Resources

in million gallons per day (MGD).

(3)

33

34

| 1 | (4) | Data shall be submitted to the Department by April 1st of each year for the period of January 1st to |
|---|---------------|--|
| 2 | | December 31st of the prior year. |
| 3 | | |
| 4 | History Note: | Authority G.S. 143-355(k); 143-355(l); 143-354(a); |
| 5 | | Eff. March 19, 2007; |
| 6 | | Readonted Eff. January 1, 2022 |

2 of 2 35

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0605

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

In Item (2), please change "has not" to "have not"

In Item (3), line 22, please add a comma after "regional water resources"

| 1 | 15A NCAC 021 | E .0605 is readopted as published in 35:21 NCR 2360 as follows: |
|----|------------------|--|
| 2 | | |
| 3 | 15A NCAC 02 | E .0605 WATER USE REDUCTION REPORTING, NEW WATER WITHDRAWAL |
| 4 | | REPORTING AND REGIONAL COORDINATION DURING DROUGHTS |
| 5 | In order to pro- | mote regional cooperation for the equitable use of water resources during a drought or other water |
| 6 | supply emerge | ncy, all persons, as specified below, shall comply with the following reporting and coordination |
| 7 | procedures: | |
| 8 | (1) | Publicly and privately owned community water systems and units of local government shall report |
| 9 | | to the Division of Water Resources the implementation of mandatory water conservation measures |
| 10 | | within 72 hours of their initial enactment. |
| 11 | (2) | All persons that intend to make a new water withdrawal, which that has not previously been |
| 12 | | registered under G.S. 143-215.22H, of 100,000 gallons or more in an area designated by the |
| 13 | | Council as suffering from Extreme or Exceptional Drought shall report to the Division of Water |
| 14 | | Resources, by the same means outlined in Item (3) of Rule .0604, Rule .0604(3) of this Section, |
| 15 | | the following information at least seven days prior to the withdrawal: |
| 16 | | (a) Contact information for the person making the water withdrawal; |
| 17 | | (b) Source(s) of water to be withdrawn; |
| 18 | | (c) Number of days water is anticipated to be withdrawn; and |
| 19 | | (d) Anticipated average daily withdrawal in million gallons per day (MGD). |
| 20 | (3) | All persons that withdraw water shall monitor drought and water supply conditions and shall |
| 21 | | participate in regional coordination for the management of water resources, evaluation of the |
| 22 | | cumulative effects of water withdrawals on regional water resources and the development of |
| 23 | | alternative water supply sources. Based on an assessment of drought severity and regional water |
| 24 | | supply conditions, the Department may contact water systems within the affected region to arrange |
| 25 | | a consultation meeting between water systems and relevant state and local agencies. The |
| 26 | | Department shall moderate these consultations and provide technical assistance. |
| 27 | | |
| 28 | History Note: | Authority G.S. 143-354(a)(8); 143-355(k); S.L. 2002-167; |
| 29 | | Eff. March 19, 2007; |
| 30 | | Readopted Eff. January 1, 2022. |

1 of 1 37

1 15A NCAC 02E .0606 is readopted as published in 35:21 NCR 2361 as follows: 2 3 15A NCAC 02E .0606 WATER SHORTAGE RESPONSE PLANNING REQUIREMENTS 4 All classes of water users shall prepare a Water Shortage Response Plan according to the water shortage response 5 planning provisions in Rules .0607 through .0611 for their appropriate class of water use. All classes of water users 6 shall prepare a Water Shortage Response Plan in accordance with Rules .0607-.0611 of this Section. The purpose of 7 these Water Shortage Response Plans is to plan for an effective course of action to minimize harmful impacts of 8 drought and water supply emergencies on public health and safety, environmental quality, and the economy. Water 9 Shortage Response Plans shall take into account the specific characteristics of the water sources and the water uses 10 for which the plan is prepared. 11 12 History Note: Authority G.S. 143-354(a)(1); 143-355(l); S.L. 2002-167; 13 Eff. March 19, 2007; 14 Readopted Eff. January 1, 2022.

38 1 of 1

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0607

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

Is a Local Shortage Response Plan part of the Local Water Supply Plan required pursuant to G.S. 143-355(I) or are these the same thing? If they are the same, please use language consistent with the statute where you can.

In (a)(4), please add a comma after "water demand"

In (e), please delete or define "disproportionate"

| 1 | 15 A NC A C 02 | E 0007 : | | | |
|----|---|---|--|--|--|
| 1 | 13A NCAC 02 | E .0607 is readopted as published in 35:21 NCR 2361 as follows: | | | |
| 2 | 15 A N.C.A.C. 0.2 | E 0407 - DUDI ICU WAND DDIWATELWOWNED WATED SVSTEM WATED SHODTAGE | | | |
| 3 | 15A NCAC 02 | E .0607 PUBLICLY AND PRIVATELY OWNED WATER SYSTEM WATER SHORTAGE RESPONSE PLANNING REQUIREMENTS | | | |
| 4 | () D 11' 1 | - | | | |
| 5 | | d privately owned Units of local governments and large community water systems that are required to | | | |
| 6 | | Water Supply Plan under G.S. 143-355(l) shall include the following information in their local Water | | | |
| 7 | • • | onse Plans for review by the Division of Water Resources: | | | |
| 8 | (1) | The designation of a staff position or organizational unit responsible for the implementation of their | | | |
| 9 | (2) | Water Shortage Response Plan; | | | |
| 10 | (2) | Notification procedures that will be used to inform employees and water users about the | | | |
| 11 | (2) | implementation of the plan and required water conservation response measures; | | | |
| 12 | (3) | Tiered levels of response actions to be taken to reduce water use based on the severity of water | | | |
| 13 | (4) | shortage conditions; | | | |
| 14 | (4) | Specific measurements of available water supply, water demand and system conditions that will be | | | |
| 15 | | used to determine the severity of water shortage conditions and to initiate water use reduction | | | |
| 16 | | measures and the movement between various levels; | | | |
| 17 | (5) | Procedures that will be used to regulate compliance with the provisions of the plan; | | | |
| 18 | (6) | Procedures for affected parties to review and comment on the plan prior to final adoption; | | | |
| 19 | (7) | Procedures to receive and review applications for variances from specific requirements of the plan | | | |
| 20 | | and the criteria that will be considered in the determination to issue a variance; | | | |
| 21 | (8) | An evaluation method to determine the actual water savings accomplished and the effectiveness of | | | |
| 22 | | the Water Shortage Response Plan when implemented; and | | | |
| 23 | (9) | Procedures for revising and updating Water Shortage Response Plans to improve plan effectiveness | | | |
| 24 | | and adapt to new circumstances. | | | |
| 25 | (b) Publicly an | d privately owned Units of local governments and large community water systems that are required to | | | |
| 26 | prepare a Loca | l Water Supply Plan shall submit a copy of their Water Shortage Response Plan and any subsequent | | | |
| 27 | revisions of the plan to the Division of Water Resources for review every five years with the full Local Water Supply | | | | |
| 28 | Plan, as require | d by G.S. 143-355(1). | | | |
| 29 | (c) Publicly an | d privately owned water systems not required to prepare a Local Water Supply Plan shall: | | | |
| 30 | (1) | Assess their vulnerability to drought and water shortage emergencies; and | | | |
| 31 | (2) | Prepare a written plan for responding to water shortage emergencies and drought using the | | | |
| 32 | | provisions of Paragraph (a) of this Rule. | | | |
| 33 | (d) Publicly an | d privately owned water systems that depend on the water storage in a private or public impoundment | | | |
| 34 | that they do not | own and operate under a contract for the withdrawal of water issued by the owner of an impoundment | | | |
| 35 | shall prepare a | written plan for responding to water shortages that is consistent with the provisions of the contract and | | | |

36

shall comply with all Water Shortage Response Plan provisions established by the owner of the impoundment.

| 1 | (e) Water Shortage Response Plans shall provide for water users who have made improvements to maximize water | | |
|----|--|--|--|
| 2 | use efficiency in their daily operations and may face disproportionate hardships when making further water use | | |
| 3 | reductions. Water | r Shortage Response Plans shall avoid restricting efficient water users in ways that would undermine | |
| 4 | incentives for wa | tter users to seek continued improvements in water use efficiency and shall honor locally approved | |
| 5 | certification prog | grams that recognize efficient water users who meet industry standards for water use efficiency and | |
| 6 | water conservation | on. | |
| 7 | (f) When the NC | DMAC issues a drought advisory designating an area of the state as currently suffering from drought, | |
| 8 | publicly and priv | rately owned water systems that depend on water from the designated area shall for the duration of | |
| 9 | the designation: | | |
| 10 | (1) | Implement the provisions of their Water Shortage Response Plan, as determined by the specific | |
| 11 | | indicators established in the plan for initiating response measures; | |
| 12 | (2) | Monitor and document water supply conditions; | |
| 13 | (3) | Educate customers and employees on the need to conserve water and how to prepare for potential | |
| 14 | | drought conditions; | |
| 15 | (4) | Inspect water delivery system components and ensure that existing equipment is operating as | |
| 16 | | efficiently as possible; | |
| 17 | (5) | Stay informed on drought and water shortage emergency conditions and participate in regional | |
| 18 | | coordination for the management of water resources; and | |
| 19 | (6) | Evaluate the feasibility of reclaiming and recycling water to meet water needs. | |
| 20 | | | |
| 21 | History Note: | Authority G.S. 143-354(a)(1); 143-355(l); S.L. 2002-167; | |
| 22 | | Eff. March 19, 2007; | |

Readopted Eff. January 1, 2022.

23

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0608

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

In (b)(4), please add a comma after "declarations" on line 15.

| 15A NCAC 02E .0608 is readopted as published in 35:21 NCR 2362 as follows: | | | | | | |
|--|--|--|---|--|--|--|
| | | | | | | |
| 15A NCAC 02F | E .0608 STATE | AGENCY | WATER | SHORTAGE | RESPONSE | PLANNING |
| | REQUIR | REMENTS | | | | |
| (a) State agence | ies that supply their | own water sha | ll prepare a w | ritten plan for res | onding to water | shortages using |
| the provisions of | f Rule .0607(a). <u>.</u>060 | 07(a) of this Sec | ction. | | | |
| (b) State agenci | es that are supplied | water by a publ | icly or private | ely owned water sy | stem shall: | |
| (1) | Review normal of | perating proced | lures and water | er use to identify | options to reduce | e water use and |
| | maximize water u | ise efficiency of | during water | supply emergenci | es, including cha | nges to normal |
| | operating procedu | res; | | | | |
| (3) | Provide informati | on to their wa | ater purveyor | (s) upon request | to support deve | lopment of the |
| | purveyor's Water | Shortage Respo | onse Plan(s), | including the age | ncy's ability to re | educe water use |
| | and limitations to | reducing water | use during dro | oughts and water e | mergencies; | |
| (4) | Develop procedu | res for inform | ning employ | ees of drought | designations, wa | ater emergency |
| | declarations and re | esponse measur | es; and | | | |
| (5) | Evaluate the feasil | oility of reclaim | ing and recyc | ling water to meet | water needs. | |
| | | | | | | |
| History Note: | Authority G.S. 143 | 3-354(a)(1); S.L | 2002-167; | | | |
| | Eff. March 19, 200 | 07; | | | | |
| | Readopted Eff. Jan | nuary 1, 2022. | | | | |
| | (a) State agence the provisions of (b) State agence (1) (3) | (a) State agencies that supply their the provisions of Rule .0607(a)060 (b) State agencies that are supplied (1) Review normal of maximize water to operating procedure (3) Provide informating purveyor's Water and limitations to a declarations and results (5) Evaluate the feasible History Note: Authority G.S. 143 Eff. March 19, 200 | 15A NCAC 02E .0608 STATE AGENCY REQUIREMENTS (a) State agencies that supply their own water shat the provisions of Rule .0607(a)0607(a) of this Sec. (b) State agencies that are supplied water by a publication of the supplied water by a publication of the supplied water use efficiency of the supplied water by a public water use efficiency of the supplied water by a public water use efficiency of the supplied water by a public water use efficiency of the supplied water use efficiency of the supplied water by a public water use efficiency of the supplied water use efficiency of the supplied water by a public water use efficiency of the supplied water by a public water use efficiency of the supplied water by a public water use efficiency of the supplied water by a public water use efficiency of the supplied water | 15A NCAC 02E .0608 STATE AGENCY WATER REQUIREMENTS (a) State agencies that supply their own water shall prepare a with provisions of Rule .0607(a)0607(a) of this Section. (b) State agencies that are supplied water by a publicly or private (1) Review normal operating procedures and water maximize water use efficiency during water operating procedures; (3) Provide information to their water purveyor purveyor's Water Shortage Response Plan(s), and limitations to reducing water use during dred (4) Develop procedures for informing employ declarations and response measures; and (5) Evaluate the feasibility of reclaiming and recycles. History Note: Authority G.S. 143-354(a)(1); S.L. 2002-167; Eff. March 19, 2007; | (a) State agencies that supply their own water shall prepare a written plan for rest the provisions of Rule .0607(a)0607(a) of this Section. (b) State agencies that are supplied water by a publicly or privately owned water sy (1) Review normal operating procedures and water use to identify maximize water use efficiency during water supply emergencies operating procedures; (3) Provide information to their water purveyor(s) upon request purveyor's Water Shortage Response Plan(s), including the agent and limitations to reducing water use during droughts and water etc. (4) Develop procedures for informing employees of drought declarations and response measures; and (5) Evaluate the feasibility of reclaiming and recycling water to meet. **History Note: Authority G.S. 143-354(a)(1); S.L. 2002-167; Eff. March 19, 2007; | 15A NCAC 02E .0608 STATE AGENCY WATER SHORTAGE RESPONSE REQUIREMENTS (a) State agencies that supply their own water shall prepare a written plan for responding to water the provisions of Rule .0607(a)0607(a) of this Section. (b) State agencies that are supplied water by a publicly or privately owned water system shall: (1) Review normal operating procedures and water use to identify options to reduce maximize water use efficiency during water supply emergencies, including characteristic operating procedures; (3) Provide information to their water purveyor(s) upon request to support dever purveyor's Water Shortage Response Plan(s), including the agency's ability to reand limitations to reducing water use during droughts and water emergencies; (4) Develop procedures for informing employees of drought designations, water declarations and response measures; and (5) Evaluate the feasibility of reclaiming and recycling water to meet water needs. **History Note: Authority G.S. 143-354(a)(1); S.L. 2002-167; Eff. March 19, 2007; |

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0609

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

In (b)(3), please add a comma after "conservation activities"

In (b)(5), delete or define "disproportionate"

| 1 | 15A NCAC 02E | .0609 is readopted a | s published in 35:21 | NCR 2362 | as follows: | | |
|----|-------------------|----------------------|------------------------|---------------|---------------------|-----------------------------|-----------------------------------|
| 2 | | | | | | | |
| 3 | 15A NCAC 02E | E .0609 LOCAL | GOVERNMENT | WATER | SHORTAGE | RESPONSE | PLANNING |
| 4 | | REQUIR | EMENTS | | | | |
| 5 | (a) Units of loca | l government that pr | ovide water to the pu | ıblic shall m | eet the requirem | ents of Rule .06 | 07(a). <u>.0607(a)</u> |
| 6 | of this Section. | | | | | | |
| 7 | (b) Units of loca | l government that do | not provide water to | the public s | shall: | | |
| 8 | (1) | Review normal wa | ater use for the type | s and numb | er of facilities of | perated to iden | tify options to |
| 9 | | reduce water use a | nd maximize water ι | ise efficienc | y by local gover | nment operation | s during water |
| 10 | | shortage emergenc | ies, including possib | le changes to | o normal operatir | ig procedures; | |
| 11 | (2) | Cooperate with loc | eal water purveyor(s) | on the deve | elopment and im | plementation of | the purveyor's |
| 12 | | Water Shortage Re | sponse Plan(s); | | | | |
| 13 | (3) | Establish a proced | ure for informing cit | zizens of dro | ought designation | is, recommende | d conservation |
| 14 | | activities and man | ndatory response me | easures to r | educe water us | e during droug | thts and water |
| 15 | | shortage emergenc | shortage emergencies; | | | | |
| 16 | (4) | Provide a mechani | sm whereby resident | ts can apply | for and receive | a variance from | specific water |
| 17 | | use reduction requi | rements implemente | d by local go | overnments; | | |
| 18 | (5) | Consider dispropo | rtionate hardships th | nat water sh | ortage response | policies and o | rdinances may |
| 19 | | cause water users v | who have already ma | de improver | ments to maximiz | ze water use eff | iciency in their |
| 20 | | daily operations; an | nd | | | | |
| 21 | (6) | Evaluate the feasib | ility of reclaiming ar | nd recycling | water to meet wa | ater needs. | |
| 22 | | | | | | | |
| 23 | History Note: | Authority G.S. 143 | -354(a)(1); S.L. 2002 | 2-167; | | | |
| 24 | | Eff. March 19, 200 | 7; | | | | |
| 25 | | Readopted Eff. Jan | <u>uary 1, 2022.</u> | | | | |

1 of 1 45

1 15A NCAC 02E .0610 is readopted as published in 35:21 NCR 2362 as follows: 2 3 15A NCAC 02E .0610 BUSINESS AND INDUSTRIAL WATER SHORTAGE RESPONSE PLANNING 4 REQUIREMENTS 5 (a) Self-supplied business and industrial water users subject to the water withdrawal registration requirements of 6 G.S. 143-215.22H shall prepare a written plan, for responding to water shortages that is consistent with industry 7 water efficiency and drought response guidelines, that incorporate the relevant provisions of Rule .0607(a). .0607(a) 8 of this Section. 9 (b) Business and industrial water users that depend on the water storage of a privately or publicly owned 10 impoundment or withdraw water under a contract issued by the owner of an impoundment shall have a written plan 11 for responding to water shortages that is consistent with the provisions of the contract and with any Water Shortage 12 Response Plan provisions established by the owner of the impoundment. 13 (c) Business and industrial water users that are supplied water by a publicly or privately owned water system shall 14 establish a procedure for responding to water shortages that is complementary to their water purveyor's Water 15 Shortage Response Plan. 16 17 History Note: Authority G.S. 143-354(a)(1); S.L. 2002-167; 18 Eff. March 19, 2007;

46 1 of 1

Readopted Eff. January 1, 2022.

19

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0611

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

In (a), what is meant by the "maximum extent possible"? Do you need this language?

In (a), line 11, please add a comma after "Extension Service"

In (b), please capitalize "state"

In (b), please add a comma after "Extreme Drought"

1 15A NCAC 02E .0611 is readopted as published in 35:21 NCR 2363 as follows: 2 3 15A NCAC 02E .0611 AGRICULTURAL AND HORTICULTURAL WATER SHORTAGE RESPONSE 4 PLANNING REQUIREMENTS 5 (a) Agricultural and horticultural water users subject to the water withdrawal registration requirements of G.S. 143-6 215.22H shall develop a written plan for responding to water shortages to maximize water use efficiency and reduce 7 water usage to the maximum extent possible. Any of the guidance documents on best management practices for the 8 efficient use of water in agricultural and horticultural operations developed by the United States Department of 9 Agriculture's Natural Resources Conservation Service, the North Carolina Department of Agriculture and Consumer 10 Services (NCDA&CS), the NCDA&CS Division of Soil and Water Conservation, North Carolina State 11 University, the North Carolina Cooperative Extension Service or other industry trade organizations may be used to 12 assist agricultural and horticultural water users identify the most appropriate water use efficiency measures that they 13 may incorporate into the plan for their particular operational needs. 14 (b) When a region of the state is designated as suffering from Severe Drought, Extreme Drought or Exceptional 15 Drought by a NCDMAC drought advisory, agricultural and horticultural water users shall reexamine and maintain 16 water delivery systems to minimize water loss and maximize water use efficiency. 17 (c) Agricultural and horticultural water users that depend on the water storage of a privately or publicly owned 18 impoundment or withdraw water under a contract issued by the owner of an impoundment shall have a written plan 19 for responding to water shortages that is consistent with the provisions of the contract and with any Water Shortage 20 Response Plan provisions established by the owner of the impoundment. 21 22 History Note: Authority S.L. 2002-167; 23 Eff. March 19, 2007;

48 1 of 1

Readopted Eff. January 1, 2022.

24

| 1 | 15A NCAC 021 | E .0612 is readopted as published in 35:21 NCR 2363 as follows: |
|----|------------------|--|
| 2 | | |
| 3 | 15A NCAC 02 | E .0612 DEFAULT WATER SHORTAGE RESPONSE PLANNING MEASURES |
| 4 | Publicly or priv | vately owned water systems that are required to prepare a Local Water Supply Plan under G.S. 143- |
| 5 | 355(l) that do 1 | not have a written Water Shortage Response Plan, as outlined in Rule .0607, .0607 of this Section, |
| 6 | shall implemen | t the default water use reduction measures of Rules .0613 and .0614 of this Section when their water |
| 7 | system or wate | r source is located in an area designated as suffering from Extreme or Exceptional Drought by the |
| 8 | Council. | |
| 9 | | |
| 10 | History Note: | Authority S.L. 2002-167; |
| 11 | | Eff. March 19, 2007; |
| 12 | | Readopted Eff. January 1, 2022. |

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0613

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

In (3)(b), please add a comma after "lawns"

In (3)(g), please add a comma after "fairways"

In (3)(i), please add a comma after "merchant stores"

In (3)(i), what are "mass merchant stores"? Is this a term known to your regulated public?

In (4), please add a comma after "boats"

In (4)(a), please add a comma after "reclaim"

In (4)(d), please add a comma after "Transport"

In (4)(d), delete or define "proper" and "safe" I note that in .0614 (4)(c) you have "as required by law"

In (5)(a), please add a comma after "recoating"

In (7), please add a comma after "state"

In (10), please add a comma after "public" and "spas"

| 1 | 15A NCAC 02E .0613 is readopted as published in 35:21 NCR 2363 as follows: | | |
|----|--|-----------|--|
| 2 | | | |
| 3 | 15A NCAC 02 | 2E .0613 | DEFAULT WATER USE REDUCTION MEASURES DURING NCDMAC |
| 4 | | | EXTREME DROUGHT DESIGNATIONS |
| 5 | When the NC | DMAC do | esignates a region of the state as suffering from Extreme Drought, the following water use |
| 6 | reduction stan | dards sha | all apply to water users in the designated area, as indicated in Rule0612: .0612 of this |
| 7 | Section: | | |
| 8 | (1) | Water | users shall reduce water use by at least 10% below the amount used in the month prior to a |
| 9 | | NCDN | MAC Extreme Drought designation in the affected area. |
| 10 | (2) | All wa | ater users shall minimize non-essential use of water. |
| 11 | (3) | Outdo | or irrigation is prohibited, except for: |
| 12 | | (a) | Watering lawns less than one inch of water per week, between the hours of 8:00 PM and |
| 13 | | | 8:00 AM; |
| 14 | | (b) | Maintaining newly installed landscapes, lawns and erosion control projects that were |
| 15 | | | initiated prior to the issuance of an Extreme Drought advisory, not to exceed the |
| 16 | | | minimum rate necessary on the day of installation and for 60 days following installation, |
| 17 | | | by means designed and operated to maximize water use efficiency and to prevent run-off |
| 18 | | | and excessive watering; |
| 19 | | (c) | Using spray irrigation by wastewater effluent treatment systems from the NCDMAC |
| 20 | | | Extreme Drought designated area(s) according to permit conditions under the provisions |
| 21 | | | of North Carolina Administrative Code 15A NCAC 02H .020002U .0100 and any |
| 22 | | | successive rules and amendments, as administered by the Department's Division of Water |
| 23 | | | Quality; |
| 24 | | (d) | Maintaining athletic fields with less than one inch of water per week between the hours |
| 25 | | | of 8:00 PM and 8:00 AM; |
| 26 | | (e) | Maintaining personal food gardens; |
| 27 | | (f) | Maintaining existing landscape plantings at the minimum rate necessary, between the |
| 28 | | | hours of 8:00 PM and 8:00 AM, using a hand held container or hose with an automatic |
| 29 | | | shutoff or using drip irrigation; |
| 30 | | (g) | Watering golf course tees, fairways and greens by means of an automated irrigation |
| 31 | | | system between the hours of 8:00 PM and 8:00 AM with less than one inch of water per |
| 32 | | | week; |
| 33 | | (h) | Syringing golf course tees and greens exhibiting visible signs of stress between the hours |
| 34 | | | of 12:00 PM and 4:00 PM, at the minimum rate necessary; and |
| 35 | | (i) | Maintaining plant inventories, by means designed and operated to maximize water use |
| 36 | | | efficiency, at retail garden centers, garden centers within mass merchant stores or other |
| 37 | | | businesses with live plants as their stock in trade. |

1 of 3 51

| l | (4) | The use of water for washing or cleaning of mobile equipment including automobiles, trucks, |
|----|------|---|
| 2 | | boats and fleet vehicles is prohibited, except for: |
| 3 | | (a) Operating commercial car washes that utilize the industry's best management practices |
| 4 | | for the efficient use of water and those that recycle, reclaim or reuse a portion of their |
| 5 | | wash water in their daily operations and have reduced total water consumption by 10% |
| 6 | | below the amount used in the month prior to a NCDMAC Extreme Drought designation |
| 7 | | in the affected area; |
| 8 | | (b) Washing with a hand-held hose with an automatic shutoff device using less than five |
| 9 | | gallons per vehicle; |
| 10 | | (c) Cleaning new and used vehicles using less than five gallons per vehicle to prepare for |
| 11 | | display in a dealer's show room, upon receipt from the manufacturer or prior owner, and |
| 12 | | following a sale prior to delivery to the purchaser; and |
| 13 | | (d) Cleaning of construction, emergency, transport or public transportation vehicles if |
| 14 | | necessary to preserve the proper functioning and safe operation of the vehicle. |
| 15 | (5) | The use of water for washing impervious and paved surfaces is prohibited, except for: |
| 16 | | (a) Prewashing in preparation for painting, recoating or sealing; and |
| 17 | | (b) Applying at the minimum rate necessary for sanitation and public health purposes. |
| 18 | (6) | The use of water for ornamental fountains, artificial waterfalls, misting machines, reflecting pools, |
| 19 | | and ornamental ponds is prohibited, except for the minimum amount of make-up water necessary |
| 20 | | to maintain aquatic life. |
| 21 | (7) | The use of water for power washing of buildings and other structures is prohibited except when |
| 22 | | necessary to meet federal, state and local public health and safety requirements. |
| 23 | (8) | The use of water for flushing sewer lines is prohibited except when necessary to meet public |
| 24 | | health and safety standards. |
| 25 | (9) | The use of water from fire hydrants is prohibited, except for: |
| 26 | | (a) Fighting fire and fire protection purposes; |
| 27 | | (b) Testing or training if it is necessary to protect public safety and has been approved by the |
| 28 | | applicable water purveyor; and |
| 29 | | (c) Flushing of potable water lines to protect the public health. |
| 30 | (10) | The filling of family, public or private swimming pools, including hot tubs, spas and whirlpool |
| 31 | | tubs, is prohibited, except: |
| 32 | | (a) For health and rehabilitative purposes as prescribed by a medical doctor or administered |
| 33 | | by a medical facility; and |
| 34 | | (b) For the minimal amount of make-up water necessary to maintain a pool's structural |
| 35 | | integrity and filtration system. |
| 36 | (11) | The serving of water in eating and drinking establishments shall be done on customer request |
| 37 | | only. |

| 1 | (12) | Water shall be applied at the minimum rate necessary to maintain effective dust and erosion |
|---|---------------|--|
| 2 | | control during the construction of roads and highways initiated prior to the declaration of an |
| 3 | | Extreme Drought by the NCMDAC. |
| 4 | | |
| 5 | History Note: | Authority S.L. 2002-167; |
| 6 | | Eff. March 19, 2007; |
| 7 | | Readonted Eff. January 1, 2022 |

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0614

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

In (3)(d), please add a comma after "athletic fields"

In (3)(f), please add a comma after "lawns"

In (4), please add a comma after "boats"

In (4)(a), add a comma after "reclaim"

In (4)(c), add a comma after "transport"

In (4)(c), delete or define "proper" and "safe"

In (9), add a comma after "public" and "spas"

| 1 | ISA NCAC 02 | E .0014 18 | readopted as published in 35:21 NCR 2304 as follows: |
|----|-----------------|-------------|--|
| 2 | | | |
| 3 | 15A NCAC 02 | 2E .0614 | DEFAULT WATER USE REDUCTION MEASURES DURING NCDMAC |
| 4 | | | EXCEPTIONAL DROUGHT DESIGNATIONS |
| 5 | When the NCI | OMAC desi | ignates a region of the state as suffering from Exceptional Drought, the following water use |
| 6 | reduction stand | dards shall | apply to water users in the designated area, as indicated in Rule .0612: .0612 of this |
| 7 | Section: | | |
| 8 | (1) | Water ı | isers shall reduce water use by at least 20% below the amount used in the month prior to |
| 9 | | the mos | st recent NCDMAC Extreme Drought designation in the affected area. |
| 10 | (2) | Non-es | sential water use shall be minimized by the maximum extent possible. |
| 11 | (3) | Outdoo | r irrigation is prohibited, except for: |
| 12 | | (a) | Using spray irrigation by wastewater effluent treatment systems in NCDMAC |
| 13 | | | Exceptional Drought designated areas according to permit conditions under the |
| 14 | | | provisions of North Carolina Administrative Code 15A NCAC 02H .020002U .0100 and |
| 15 | | | any successive rules and amendments, as administered by the Department's Division of |
| 16 | | | Water Quality; |
| 17 | | (b) | Watering personal food gardens by hand with a container or hand held hose with an |
| 18 | | | automatic shutoff device or using drip irrigation between the hours of 8:00 PM and 8:00 |
| 19 | | | AM; |
| 20 | | (c) | Maintaining existing landscape plantings at the minimum rate necessary, between the |
| 21 | | | hours of 8:00 PM and 8:00 AM, using a hand held container or hose with an automatic |
| 22 | | | shutoff or using drip irrigation; |
| 23 | | (d) | Watering golf course tees, fairways and greens, athletic fields and lawns between the |
| 24 | | | hours of 8:00 PM and 8:00 AM with less than one half inch of water per week; |
| 25 | | (e) | Syringing of golf course tees and greens exhibiting visible signs of stress between the |
| 26 | | | hours of 1:00 PM and 4:00 PM, at the minimum rate necessary; |
| 27 | | (f) | Maintaining newly installed landscapes, lawns and erosion control projects that were |
| 28 | | | initiated prior to the issuance of an Extreme Drought advisory, not to exceed the |
| 29 | | | minimum rate necessary on the day of installation and for 28 days following installation, |
| 30 | | | by means designed and operated to maximize water use efficiency and to prevent run-off |
| 31 | | | and excessive watering; and |
| 32 | | (g) | Maintaining plant inventories, by means designed and operated to maximize water use |
| 33 | | | efficiency, at retail garden centers, garden centers within mass merchant stores, or other |
| 34 | | | businesses with live plants as their stock in trade. |
| 35 | (4) | The use | e of water for washing or cleaning mobile equipment including automobiles, trucks, boats |
| 36 | | and flee | et vehicles is prohibited, except for: |
| | | | |

1 of 2 55

| I | | (a) Operating commercial car washes that utilize the industry's best management practices | |
|----|---------------|---|--|
| 2 | | for the efficient use of water and those that recycle, reclaim or reuse a portion of their | |
| 3 | | wash water and have reduced total water consumption by 20% below the amount used in | |
| 4 | | the month prior to the most recent NCDMAC Extreme Drought designation in the | |
| 5 | | affected area; | |
| 6 | | (b) Cleaning of new and used vehicles in preparation for display in a dealer's show room, | |
| 7 | | using less than five gallons per vehicle; and | |
| 8 | | (c) Using the minimum amount of water necessary to clean construction, emergency, | |
| 9 | | transport or public transportation vehicles, if required to preserve the proper functioning | |
| 10 | | and safe operation of the vehicle as required by law. | |
| 11 | (5) | The use of water for washing impervious and paved surfaces is prohibited except for using the | |
| 12 | | minimum amount of water necessary for sanitation and public health purposes. | |
| 13 | (6) | The use of water for power washing of buildings and other structures is prohibited. | |
| 14 | (7) | The use of water for flushing sewer lines is prohibited except when necessary to meet public | |
| 15 | | health and safety standards. | |
| 16 | (8) | The use of water from fire hydrants is prohibited, except for: | |
| 17 | | (a) Fighting fire and fire protection purposes; and | |
| 18 | | (b) Flushing of drinking water lines to protect public health and safety. | |
| 19 | (9) | The filling of family, public or private swimming pools, including hot tubs, spas and whirlpool | |
| 20 | | tubs, is prohibited except for health and rehabilitative purposes as prescribed by a medical docto | |
| 21 | | or administered by a medical facility. | |
| 22 | (10) | The use of water for ornamental fountains, artificial waterfalls, misting machines, reflecting pools, | |
| 23 | | and ornamental ponds is prohibited, except for the minimum amount of make-up water necessary | |
| 24 | | to maintain aquatic life. | |
| 25 | (11) | The serving of water in eating and drinking establishments shall be done on customer request | |
| 26 | | only. | |
| 27 | (12) | Water shall be applied at the minimum rate necessary to maintain effective dust and erosion | |
| 28 | | control during the construction of roads and highways initiated prior to the declaration of an | |
| 29 | | Extreme Drought by the NCDMAC. | |
| 30 | | | |
| 31 | History Note: | Authority S.L. 2002-167; | |
| 32 | | Eff. March 19, 2007; | |
| 33 | | Readonted Eff. January 1, 2022 | |

56 2 of 2

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02E .0615

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

What are "other water emergencies"? Can you instead say "water shortage emergency as defined by G.S. 143-350"?

| 1 | 15A NCAC 02E .0615 is readopted | as published in 35:21 NCR 2365 as follows: | | |
|----|-------------------------------------|---|--|--|
| 2 | | | | |
| 3 | 15A NCAC 02E .0615 WATE | R REUSE DURING DROUGHTS AND WATER EMERGENCIES | | |
| 4 | Water users may use reclaimed wa | ter under the provisions of North Carolina Administrative Code 15A NCAC 02H | | |
| 5 | .020002U .0100 and any successiv | .020002U .0100 and any successive rules and amendments, as administered by the Department's Division of Water | | |
| 6 | Quality, during droughts and other | water emergencies to reduce withdrawals of surface water and ground water and | | |
| 7 | to extend available water supplies. | | | |
| 8 | | | | |
| 9 | History Note: Authority S.L. 20 | 02-167; <u>G.S. 143-215.1; 143-215.3(a)(1); 143-355.5;</u> | | |
| 10 | Eff. March 19, 20 | 907; | | |
| 11 | <u>Readopted Eff. Jo</u> | anuary 1, 2022. | | |

58 1 of 1

AGENCY: Environmental Management Commission

RULE CITATION: 15A NCAC 02L .0202

DEADLINE FOR RECEIPT: Friday, December 10, 2021

<u>PLEASE NOTE:</u> 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 the following technical changes be made:

In (a), please capitalize "state" on lines 4 and 6.

In (b)(1), I am reading this rule to say that if the standard set forth in this Rule allows for more than the practical quantitation limit, then the standard essentially becomes the practical quantitation limit? If that's correct, how is your regulated public to know? I see reference to this elsewhere in your Rules. Is it set forth elsewhere?

In (b)(2), line 13, how will the Director make this determination? I assume if he or she determines that there is a public health risk?

In (b)(3), what is meant by "as determined by the Director"? Do you need this language? If so, how is this to be determined?

In (c), please change "which" to "that" in "which have been determined..." on line 23 and in "which are not naturally" on line 24.

In (c), how is this determination made whether the concentration of the tracer is protective of human health?

In (c), is there a cross-reference available to the permitting of these tracers?

In (c), line 26, where can these "practical quantitation limits" be found? Is there a cross-reference available?

What is the intent and what is your authority for (c) in line 26 of page 1 through line 11 of page 2? I don't understand what is going on with the IMACs. This appears to provide for rulemaking outside of the rulemaking process set forth in the APA. I note that G.S. 143-214.1(e), within the cited authority, specifically says "Chapter 150B of the General Statutes governs the adoption and publication of rules under this Article."

What is your authority to require publication in the NC Register on line 7? Further, given the requirement in G.S. 143-214.1 that these standards go through the rulemaking

process set forth in the APA, what is your authority to set a different process? Are you essentially creating a petition for rulemaking rule pursuant to 150B-20?

In (d)(2), change "which" to "that" in "which corresponds"

In (d)(3) through (5), what are these limits? How does this work? Is the Integrated Risk Information System to be used, unless there isn't a standard for one of the standards? Then the Health Advisories are to be used?

In (e), what is meant by "in order or preference"? What is actually being required here?

Please end (e) with a colon

Please end (e)(1) through (3) with a semi-colon and add "or" at the end of (e)(3).

In (f), what is this "public notice and opportunity for hearing"? Is this through the rulemaking process set forth in the APA?

In (f)(1), change "which" to "that"

In (f)(3), how is it to be determined whether it would "produce serious hardship"? What factors are to be used?

What is the purpose of (g)? Specifically, what is meant by lines 9-10? This appears to provide for rulemaking outside of rulemaking. I don't see where there is authority. Also, what is meant by lines 10-13? This also appears to provide for rulemaking outside of the rulemaking process set forth in the APA.

In (g), line 12, please double check the cross-reference to Paragraphs (d) and (e). Should it be Paragraph (c)?

In (h), please add a comma after "colloidal"

In (h), line 15, change "which" to "that" in "which is mobile" on line 15 and "which is preserved" on line 16.

On line 15, what is meant by "this"? This Paragraph?

15A NCAC 02L .0202 is amended as published in 35:14 NCR 1560 with changes as follows:

15A NCAC 02L .0202 GROUNDWATER QUALITY STANDARDS

- (a) The groundwater quality standards for the protection of the groundwaters of the state are those specified in this Rule. They are the maximum allowable concentrations resulting from any discharge of contaminants to the land or waters of the state, which may be tolerated without creating a threat to human health or which would otherwise render the groundwater unsuitable for its intended best usage.
- (b) The groundwater quality standards for contaminants specified in Paragraphs (h) and (i) of this Rule are as listed, except that:
 - (1) Where the standard for a substance is less than the practical quantitation limit, the detection of that substance at or above the practical quantitation limit constitutes a violation of the standard.
 - (2) Where two or more substances exist in combination, the Director shall consider the effects of chemical interactions as determined by the Division of Public Health and may establish maximum concentrations at values less than those established in accordance with Paragraphs (c), (h), or (i) of this Rule. In the absence of information to the contrary, in accordance with Paragraph (d) of this Rule, the carcinogenic risks associated with carcinogens present shall be considered additive and the toxic effects associated with non-carcinogens present shall also be considered additive.
 - (3) Where naturally occurring substances exceed the established standard, the standard shall be the naturally occurring concentration as determined by the Director.
 - (4) Where the groundwater standard for a substance is greater than the Maximum Contaminant Level (MCL), the Director shall apply the MCL as the groundwater standard at any private drinking water well or public water system well that may be impacted.
 - (c) Except for tracers used in concentrations which have been determined by the Division of Public Health to be protective of human health, and the use of which has been permitted by the Division, substances which are not naturally occurring and for which no standard is specified shall not be permitted in concentrations at or above the practical quantitation limit in Class GA or Class GSA groundwaters. Any person may petitionrequest the Director of the Division of Water Resources to establishestablish, update, or remove an interim maximum allowable concentration[Interim Maximum Allowable Concentration (IMAC) for a substance for which a standard has not been established under this Rule. In response to this request, the Director may establish, update, or remove an IMAC. The petitionerrequestor shall submit relevant toxicological and epidemiological data, study results, and calculations necessary to establish a standard in accordance with ParagraphParagraphs (d) and (e) of this Rule. Within three months after the establishment of an interim maximum allowable concentration for a substance by the Director, the Director shall initiate action to consider adoption of a standard for that substance. If the information submitted is not in accordance with Paragraphs (d) and (e) of this Rule, the Director of the Division of Water Resources shall request additional information from the [petitioner-]requester. If the [petitioner]requester does not provide the additional information necessary to be in accordance with Paragraphs (d) and (e) of this Rule, the Director of the Division of Water Resources shall [deny]return the [petition-]request. The Director shall provide an annual update to the

| 1 | Commission o | n the status of IMAC requests. At least 30 days prior to [establishing establishing, updating, or | |
|----|--|--|--|
| 2 | removing an IN | MAC for any substance, the Division of Water Resources shall provide public notice that an IMAC has | |
| 3 | been [requested.]requested to be established, updated, or removed. The public notice shall include the [petitic | | |
| 4 | requesting the establishment request for the establishment, update, or removal of the IMAC for a substance, the leve | | |
| 5 | of the proposed | I IMAC, if applicable the level of the existing IMAC, and the basis upon which the Division of Water | |
| 6 | Resources has | relied in development of the proposed [HMAC.]IMAC establishment, update, or removal. This notice | |
| 7 | shall be publis | shed in the North Carolina Register and posted on the Division of Water Resources's website: | |
| 8 | https://deq.nc.g | gov/about/divisions/water-resources/water-planning/classification-standards/groundwater-imacs. If the | |
| 9 | Director of the | Division of Water Resources establishes or updates an IMAC, the IMAC shall be posted on the Division | |
| 10 | of Water Reso | urce's website and the Commission shall be notified in writing within 30 calendar days that a new | |
| 11 | IMAC has been | n [established.]established or an existing IMAC has been updated or removed. | |
| 12 | (d) Except as j | provided in Paragraph (f) of this Rule, groundwater quality standards for substances in Class GA and | |
| 13 | Class GSA gro | undwaters are established as the least of: | |
| 14 | (1) | Systemic threshold concentration calculated as follows: [Reference Dose (mg/kg/day) x 70 kg (adult | |
| 15 | | body weight) x Relative Source Contribution (.10(0.10 for inorganics; .200.20 for organics)] / [2 | |
| 16 | | liters/day (avg. water consumption)]; | |
| 17 | (2) | Concentration which corresponds to an incremental lifetime cancer risk of 1x10-6; | |
| 18 | (3) | Taste threshold limit value; | |
| 19 | (4) | Odor threshold limit value; | |
| 20 | (5) | Maximum contaminant level; or | |
| 21 | (6) | National secondary drinking water standard. | |
| 22 | (e) The follow | ing references, in order of preference, shall be used in establishing concentrations of substances which | |
| 23 | correspond to l | evels described in Paragraph (d) of this Rule. | |
| 24 | (1) | Integrated Risk Information System (U.S. EPA). | |
| 25 | (2) | Health Advisories (U.S. EPA Office of Drinking Water). | |
| 26 | (3) | Other health risk assessment data published by the U.S. EPA. | |
| 27 | (4) | Other relevant, published health risk assessment data, and scientifically valid peer-reviewed | |
| 28 | | published toxicological data. | |
| 29 | (f) The Comm | ission may establish groundwater standards less stringent than existing maximum contaminant levels | |
| 30 | or national seco | ondary drinking water standards if it finds, after public notice and opportunity for hearing, that: | |
| 31 | (1) | more recent data published in the EPA health references listed in Paragraph (e) of this Rule results | |
| 32 | | in a standard which is protective of public health, taste threshold, or odor threshold; | |
| 33 | (2) | the standard will not endanger the public health and safety, including health and environmental | |
| 34 | | effects from exposure to groundwater contaminants; and | |
| 35 | (3) | compliance with a standard based on the maximum contaminant level or national secondary drinking | |
| 36 | | water standard would produce serious hardship without equal or greater public benefit. | |

62 2 of 13

1 (g) Groundwater quality standards specified in Paragraphs (h) and (i) of this Rule and interim maximum allowable 2 concentrations IMACs established pursuant to Paragraph (c) of this Rule shall be reviewed by the Director Division of 3 Water Resources on a triennial basis basis and reported to the Commission. The Director of the Division of Water 4 Resources shall [consider] take any of the following actions during the review of an established IMAC: 5 recommend codifying the IMAC as a groundwater quality standard under this Rule; (1) 6 <u>(2)</u> update the IMAC value based on data published or rescinded subsequent to the previous review; 7 **(3)** remove the IMAC based on data published or rescinded subsequent to the previous review; or 8 **(4)** retain the IMAC at the current value; 9 Any IMAC recommended under Subparagraph (g)(1) of this Rule that the Commission does not codify shall remain 10 an established IMAC and be reviewed during the next triennial review. Appropriate modifications Modifications to established standards shall be mademade, through rulemaking, in accordance with the procedure procedures prescribed 11 12 in ParagraphParagraphs (d) and (e) of this Rule where modifications are considered appropriate based on data 13 published subsequent to the previous review. 14 (h) Class GA Standards. Unless otherwise indicated, the standard refers to the total concentration in micrograms per 15 liter (µg/L) of any constituent in a dissolved, colloidal or particulate form which is mobile in groundwater. This does 16 not apply to sediment or other particulate matter which is preserved in a groundwater sample as a result of well 17 construction or sampling procedures. The Class GA standards are: 18 Acenaphthene: 80; 19 Acenaphthylene: 200; (2)20 Acetone: 6 mg/L; 21 Acrylamide: 0.008; 22 Anthracene: 2 mg/L; 23 Arsenic: 10; 24 Atrazine and chlorotriazine metabolites: 3; Barium: 700; 25 26 (9)Benzene: 1; 27 (10)Benzo(a)anthracene (benz(a)anthracene): 0.05; 28 Benzo(b)fluoranthene: 0.05; Benzo(k)fluoranthene: 0.5; 29 (12)30 (13)Benzoic acid: 30 mg/L; (14) Benzo(g,h,i,)perylene: 200; 31 Benzo(a)pyrene: 0.005; 32 33 Bis(chloroethyl)ether: 0.03; 34 (17)Bis(2 ethylhexyl) phthalate (di(2 ethylhexyl) phthalate): 3; 35 (18)Boron: 700; Bromodichloromethane: 0.6; 36 (19)

Bromoform (tribromomethane): 4;

37

```
(21) n Butylbenzene: 70;
 1
 2
                       sec Butylbenzene: 70;
                      tert Butylbenzene: 70;
 3
              (23)
                       Butylbenzyl phthalate: 1 mg/L;
 4
              (24)
                       Cadmium: 2;
 5
              (25)
                       Caprolactam: 4 mg/L;
 6
              (26)
 7
                       Carbofuran: 40;
              (27)
                       Carbon disulfide: 700;
 8
              (28)
 9
                       Carbon tetrachloride: 0.3;
               (29)
10
              (30)
                      Chlordane: 0.1:
                       Chloride: 250 mg/L;
11
              (31)
                       Chlorobenzene: 50;
12
              (32)
13
              (33)
                       Chloroethane: 3,000;
                       Chloroform (trichloromethane): 70;
14
              (34)
                       Chloromethane (methyl chloride): 3;
15
              (36) 2-Chlorophenol: 0.4;
16
                       2 Chlorotoluene (o chlorotoluene): 100;
17
18
              (38)
                       Chromium: 10;
                       Chrysene: 5;
19
              (39)
                       Coliform organisms (total): 1 per 100 mL;
20
                      Color: 15 color units;
21
              (41)
22
              (42)
                       Copper: 1 mg/L;
              (43) Cyanide (free cyanide): 70;
23
24
                      2, 4 D (2,4 dichlorophenoxy acetic acid): 70;
              (45) DDD: 0.1:
25
                      DDT: 0.1;
26
              (46)
              (47)
                      Dibenz(a,h)anthracene: 0.005;
27
28
                       Dibromochloromethane: 0.4;
              (49)
                      1,2 Dibromo 3 chloropropane: 0.04;
29
                       Dibutyl (or di n butyl) phthalate: 700;
30
              (51) 1,2 Dichlorobenzene (orthodichlorobenzene): 20;
31
                      1,3 Dichlorobenzene (metadichlorobenzene): 200;
32
33
              (53)
                     1,4 Dichlorobenzene (paradichlorobenzene): 6;
              (54)
                       Dichlorodifluoromethane (Freon 12; Halon): 1 mg/L;
34
                       1,1 Dichloroethane: 6;
35
              (55)
36
                       1,2 Dichloroethane (ethylene dichloride): 0.4;
                       1,2 Dichloroethene (cis): 70;
37
               (57)
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64 4 of 13

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(58)
                     1,2 Dichloroethene (trans): 100;
 1
 2
                       1,1 Dichloroethylene (vinylidene chloride): 350;
 3
              (60)
                     1,2 Dichloropropane: 0.6;
                       1,3 Dichloropropene (cis and trans isomers): 0.4;
              (61)
 4
                      Dieldrin: 0.002;
 5
              (62)
                       Diethylphthalate: 6 mg/L;
 6
                       2,4 Dimethylphenol (m xylenol): 100;
 7
               (65) Di n octyl phthalate: 100;
 8
 9
               (66) 1,4 Dioxane (p dioxane): 3;
                      Dioxin (2,3,7,8 TCDD): 0.0002 ng/L;
10
                      1,1 Diphenyl (1,1, biphenyl): 400;
11
              (69)
                    Dissolved solids (total): 500 mg/L;
12
13
              (70)
                      Disulfoton: 0.3;
14
                       Diundecyl phthalate (Santicizer 711): 100;
                      Endosulfan: 40;
15
              (72)
                    Endrin, total (includes endrin, endrin aldehyde and endrin ketone): 2;
16
                       Epichlorohydrin: 4;
17
18
              (75)
                       Ethyl acetate: 3 mg/L;
              (76)
                       Ethylbenzene: 600;
19
                       Ethylene dibromide (1,2 dibromoethane): 0.02;
20
              (78)
21
                      Ethylene glycol: 10 mg/L;
                       Fluoranthene: 300;
22
               (79)
              (80) Fluorene: 300;
23
               (81) Fluoride: 2 mg/L;
24
                     Foaming agents: 500;
25
              (83) Formaldehyde: 600;
26
                    Gross alpha (adjusted) particle activity (excluding radium 226 and uranium): 15 pCi/L;
27
28
                      Heptachlor: 0.008;
                     Heptachlor epoxide: 0.004;
29
              (86)
                      Heptane: 400;
30
              (88) Hexachlorobenzene (perchlorobenzene): 0.02;
31
                     Hexachlorobutadiene: 0.4:
32
33
              (90) Hexachlorocyclohexane isomers (technical grade): 0.02;
                      n Hexane: 400:
34
                      Indeno(1,2,3 cd)pyrene: 0.05;
35
              (92)
                    <u>Iron: 300:</u>
36
                     Isophorone: 40;
37
               (94)
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(95) Isopropylbenzene: 70;
 1
 2
                   Isopropyl ether: 70;
              (97) Lead: 15;
 3
                     Lindane (gamma hexachlorocyclohexane): 0.03;
 4
              (99)
                    Manganese: 50;
 5
 6
              (100) Mercury: 1;
 7
              (101) Methanol: 4 mg/L;
              (102) Methoxychlor: 40;
 8
 9
              (103) Methylene chloride (dichloromethane): 5;
10
              (104) Methyl ethyl ketone (2 butanone): 4 mg/L;
              (105) 2 Methylnaphthalene: 30;
11
              (106) 3 Methylphenol (m cresol): 400;
12
              (107) 4 Methylphenol (p cresol): 40;
13
14
              (108) Methyl tert butyl ether (MTBE): 20;
              (109) Naphthalene: 6;
15
              (110) Nickel: 100;
16
              (111) Nitrate (as N): 10 mg/L;
17
              (112) Nitrite (as N): 1 mg/L;
18
              (113) N-nitrosodimethylamine: 0.0007;
19
              (114) Oxamyl: 200;
20
21
              (115) Pentachlorophenol: 0.3;
              (116) Petroleum aliphatic carbon fraction class (C5 C8): 400;
22
              (117) Petroleum aliphatic carbon fraction class (C9 C18): 700;
23
              (118) Petroleum aliphatic carbon fraction class (C19 C36): 10 mg/L;
24
              (119) Petroleum aromatics carbon fraction class (C9 C22): 200;
25
              (120) pH: 6.5 8.5;
26
              (121) Phenanthrene: 200;
27
28
              (122) Phenol: 30;
              (123) Phorate: 1;
29
              (124) n Propylbenzene: 70;
30
              (125) Pyrene: 200;
31
              (126) Selenium: 20:
32
33
              (127) Silver: 20;
                      Simazine: 4;
34
              (128)
              (129) Styrene: 70;
35
36
              (130) Sulfate: 250 mg/L;
                     1,1,2,2 Tetrachloroethane: 0.2;
37
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66 6 of 13

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(132) Tetrachloroethylene (perchloroethylene; PCE): 0.7;
1
2
              (133) 2,3,4,6 Tetrachlorophenol: 200;
              (134) Toluene: 600;
3
4
              (135) Toxaphene: 0.03;
5
              (136) 2,4,5 TP (Silvex): 50;
6
              (137) 1,2,4 Trichlorobenzene: 70;
7
              (138) 1,1,1 Trichloroethane: 200;
8
              (139) Trichloroethylene (TCE): 3;
9
              (140) Trichlorofluoromethane: 2 mg/L;
              (141) 1,2,3 Trichloropropane: 0.005;
10
              (142) 1,2,4 Trimethylbenzene: 400;
11
              (143) 1,3,5 Trimethylbenzene: 400;
12
              (144) 1,1,2 Trichloro 1,2,2 trifluoroethane (CFC 113): 200 mg/L;
13
             (145) Vinyl chloride: 0.03;
14
              (146) Xylenes (o, m, and p): 500; and
15
              (147) Zinc: 1 mg/L.
16
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| Substance | Chemical Abstracts | Standard (μg/L) |
|---|------------------------|-----------------|
| | Service (CAS) Registry | |
| | <u>Number</u> | |
| Acenaphthene | 83-32-9 | <u>80</u> |
| Acenaphthylene | <u>208-96-8</u> | <u>200</u> |
| Acetic acid | <u>64-19-7</u> | <u>5,000</u> |
| Acetochlor | <u>34256-82-1</u> | <u>100</u> |
| Acetochlor ESA | <u>187022-11-3</u> | <u>500</u> |
| Acetochlor OXA | <u>184992-44-4</u> | <u>500</u> |
| Acetone | <u>67-64-1</u> | 6,000 |
| Acetophenone | <u>98-86-2</u> | <u>700</u> |
| Acrolein | 107-02-8 | 4 |
| Acrylamide | <u>79-06-1</u> | 0.008 |
| Alachlor | <u>15972-60-8</u> | 2 |
| Aldrin | 309-00-2 | 0.002 |
| Anthracene | <u>120-12-7</u> | 2,000 |
| Antimony | <u>7440-36-0</u> | 1 |
| Arsenic | 7440-38-2 | <u>10</u> |
| Atrazine and chlorotriazine metabolites | 1912-24-9 | 3 |
| <u>Barium</u> | 7440-39-3 | <u>700</u> |

| Benzo(a)anthracene 56-55-3 0.05 Benzo(a)pyrene 50-32-8 0.005 Benzo(b)fluoranthene 205-99-2 0.05 Benzo(g,h,i)perylene 191-24-2 200 Benzo(k)fluoranthene 207-08-9 0.5 Benzoic acid 65-85-0 30,000 Benzyl alcohol 100-51-6 700 Beryllium 7440-41-7 4 Bischloroethylbether 111-44-4 0.03 Bis(2-ethylhexyl) phthalate 117-81-7 3 Boron 7440-42-8 700 Bromodichloromethane 75-27-4 0.6 Bromoform 75-25-2 4 Bromomethane 71-36-3 590 sec-Butanol 71-36-3 590 sec-Butanol 78-92-2 10,000 n-Butylbenzene 104-51-8 70 sec-Butylbenzene 135-98-8 70 tert-Butylbenzene 98-06-6 70 Butylbenzyl phthalate 85-68-7 1,000 Cadmium 7440-43-9 <th>Benzene</th> <th><u>71-43-2</u></th> <th>1</th> | Benzene | <u>71-43-2</u> | 1 |
|---|-----------------------------|-------------------|--------------|
| Benzo(b)fluoranthene 205-99-2 0.05 Benzo(b)fluoranthene 207-08-9 0.5 Benzo(cacid 65-85-0 30,000 Benzyl alcohol 100-51-6 700 Beryllium 7440-41-7 4 Bis(chloroethyl)ether 111-44-4 0.03 Bis(2-ethylhexyl) phthalate 117-81-7 3 Boron 7440-42-8 700 Bromodichloromethane 75-27-4 0.6 Bromomethane 74-839-9 10 n-Butanol 71-36-3 590 see-Butanol 78-92-2 10,000 n-Butylbenzene 104-51-8 70 see-Butylbenzene 135-98-8 70 tert-Butylbenzene 135-98-8 70 tert-Butylbenzene 98-06-6 70 Butylbenzyl phthalate 85-68-7 1,000 Cadmium 74-04-3-9 2 Caprolactam 105-60-2 4,000 Carbon disulfide 75-15-0 700 Carbon disulfide 75-15-0 700 Carbon terachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | Benzo(a)anthracene | <u>56-55-3</u> | 0.05 |
| Benzo(g.h.i)perylene 191-24-2 200 Benzo(k)fluoranthene 207-08-9 0.5 Benzoic acid 65-85-0 30,000 Benzyl alcohol 100-51-6 700 Beryllium 7440-41-7 4 Bis(chloroethyl)ether 111-44-4 0.03 Bis(2-ethylhexyl) phthalate 117-81-7 3 Boron 7440-42-8 700 Bromodichloromethane 75-27-4 0.6 Bromoform 75-25-2 4 Bromomethane 74-839-9 10 n-Butanol 71-36-3 590 see-Butanol 78-92-2 10,000 n-Butylbenzene 104-51-8 70 see-Butylbenzene 135-98-8 70 tert-Butylbenzene 135-98-8 70 tert-Butylbenzene 98-06-6 70 Butylbenzyl phthalate 85-68-7 1,000 Cadmium 7440-43-9 2 Caprolactam 105-60-2 4,000 Carbon disulfide 75-15-0 700 Carbon disulfide 75-15-0 700 Carbon terachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | Benzo(a)pyrene | 50-32-8 | 0.005 |
| Benzo(k)fluoranthene 207-08-9 0.5 | Benzo(b)fluoranthene | 205-99-2 | 0.05 |
| Benzol acid 65-85-0 30,000 | Benzo(g,h,i)perylene | <u>191-24-2</u> | <u>200</u> |
| Benzyl alcohol 100-51-6 700 | Benzo(k)fluoranthene | 207-08-9 | <u>0.5</u> |
| Beryllium 7440-41-7 4 Bis(chloroethyl)ether 111-44-4 0.03 Bis(2-ethylhexyl) phthalate 117-81-7 3 Boron 7440-42-8 700 Bromodichloromethane 75-27-4 0.6 Bromoform 75-25-2 4 Bromomethane 74-839-9 10 n-Butanol 71-36-3 590 sec-Butanol 78-92-2 10,000 n-Butylbenzene 104-51-8 70 sec-Butylbenzene 135-98-8 70 tert-Butylbenzene 98-06-6 70 Butylbenzyl phthalate 85-68-7 1,000 Cadmium 7440-43-9 2 Caprolactam 105-60-2 4,000 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | Benzoic acid | <u>65-85-0</u> | 30,000 |
| Bis(chloroethyl)ether 111-44-4 0.03 Bis(2-ethylhexyl) phthalate 117-81-7 3 Boron 7440-42-8 700 Bromodichloromethane 75-27-4 0.6 Bromoform 75-25-2 4 Bromomethane 74-839-9 10 n-Butanol 71-36-3 590 sec-Butanol 78-92-2 10,000 n-Butylbenzene 104-51-8 70 sec-Butylbenzene 135-98-8 70 tert-Butylbenzene 98-06-6 70 Butylbenzyl phthalate 85-68-7 1,000 Cadmium 7440-43-9 2 Caprolactam 105-60-2 4,000 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | Benzyl alcohol | <u>100-51-6</u> | <u>700</u> |
| Bis(2-ethylhexyl) phthalate 117-81-7 3 | <u>Beryllium</u> | <u>7440-41-7</u> | 4 |
| Boron 7440-42-8 700 | Bis(chloroethyl)ether | <u>111-44-4</u> | 0.03 |
| Bromodichloromethane 75-27-4 0.6 Bromoform 75-25-2 4 Bromomethane 74-839-9 10 n-Butanol 71-36-3 590 sec-Butanol 78-92-2 10,000 n-Butylbenzene 104-51-8 70 sec-Butylbenzene 135-98-8 70 tert-Butylbenzene 98-06-6 70 Butylbenzyl phthalate 85-68-7 1,000 Cadmium 7440-43-9 2 Caprolactam 105-60-2 4,000 Carbofuran 1563-66-2 40 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | Bis(2-ethylhexyl) phthalate | <u>117-81-7</u> | 3 |
| Bromoform 75-25-2 4 Bromomethane 74-839-9 10 n-Butanol 71-36-3 590 sec-Butanol 78-92-2 10,000 n-Butylbenzene 104-51-8 70 sec-Butylbenzene 135-98-8 70 tert-Butylbenzene 98-06-6 70 Butylbenzyl phthalate 85-68-7 1,000 Cadmium 7440-43-9 2 Caprolactam 105-60-2 4,000 Carbofuran 1563-66-2 40 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | Boron | 7440-42-8 | <u>700</u> |
| Bromomethane 74-839-9 10 n-Butanol 71-36-3 590 sec-Butanol 78-92-2 10,000 n-Butylbenzene 104-51-8 70 sec-Butylbenzene 135-98-8 70 tert-Butylbenzene 98-06-6 70 Butylbenzyl phthalate 85-68-7 1,000 Cadmium 7440-43-9 2 Caprolactam 105-60-2 4,000 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | Bromodichloromethane | <u>75-27-4</u> | <u>0.6</u> |
| n-Butanol 71-36-3 590 sec-Butanol 78-92-2 10,000 n-Butylbenzene 104-51-8 70 sec-Butylbenzene 135-98-8 70 tert-Butylbenzene 98-06-6 70 Butylbenzyl phthalate 85-68-7 1,000 Cadmium 7440-43-9 2 Caprolactam 105-60-2 4,000 Carbofuran 1563-66-2 40 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | Bromoform | <u>75-25-2</u> | 4 |
| sec-Butanol 78-92-2 10,000 n-Butylbenzene 104-51-8 70 sec-Butylbenzene 135-98-8 70 tert-Butylbenzene 98-06-6 70 Butylbenzyl phthalate 85-68-7 1,000 Cadmium 7440-43-9 2 Caprolactam 105-60-2 4,000 Carbofuran 1563-66-2 40 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | Bromomethane | <u>74-839-9</u> | <u>10</u> |
| n-Butylbenzene 104-51-8 70 sec-Butylbenzene 135-98-8 70 tert-Butylbenzene 98-06-6 70 Butylbenzyl phthalate 85-68-7 1,000 Cadmium 7440-43-9 2 Caprolactam 105-60-2 4,000 Carbofuran 1563-66-2 40 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | <u>n-Butanol</u> | <u>71-36-3</u> | <u>590</u> |
| Sec-Butylbenzene 135-98-8 70 tert-Butylbenzene 98-06-6 70 Butylbenzyl phthalate 85-68-7 1,000 Cadmium 7440-43-9 2 Caprolactam 105-60-2 4,000 Carbofuran 1563-66-2 40 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | sec-Butanol | <u>78-92-2</u> | 10,000 |
| tert-Butylbenzene 98-06-6 70 Butylbenzyl phthalate 85-68-7 1,000 Cadmium 7440-43-9 2 Caprolactam 105-60-2 4,000 Carbofuran 1563-66-2 40 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | n-Butylbenzene | <u>104-51-8</u> | <u>70</u> |
| Butylbenzyl phthalate 85-68-7 1,000 Cadmium 7440-43-9 2 Caprolactam 105-60-2 4,000 Carbofuran 1563-66-2 40 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | sec-Butylbenzene | <u>135-98-8</u> | <u>70</u> |
| Cadmium 7440-43-9 2 Caprolactam 105-60-2 4,000 Carbofuran 1563-66-2 40 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | tert-Butylbenzene | <u>98-06-6</u> | <u>70</u> |
| Caprolactam 105-60-2 4,000 Carbofuran 1563-66-2 40 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | Butylbenzyl phthalate | <u>85-68-7</u> | 1,000 |
| Carbofuran 1563-66-2 40 Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | <u>Cadmium</u> | 7440-43-9 | 2 |
| Carbon disulfide 75-15-0 700 Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | <u>Caprolactam</u> | <u>105-60-2</u> | 4,000 |
| Carbon tetrachloride 56-23-5 0.3 Chlordane 12789-03-6 0.1 | <u>Carbofuran</u> | <u>1563-66-2</u> | <u>40</u> |
| <u>Chlordane</u> 12789-03-6 0.1 | Carbon disulfide | <u>75-15-0</u> | <u>700</u> |
| 1,007,00,0 | Carbon tetrachloride | <u>56-23-5</u> | <u>0.3</u> |
| Chloride 16887-00-6 250,000 | Chlordane | <u>12789-03-6</u> | <u>0.1</u> |
| <u>Cinoride</u> | Chloride | <u>16887-00-6</u> | 250,000 |
| <u>Chlorobenzene</u> <u>108-90-7</u> <u>50</u> | Chlorobenzene | 108-90-7 | <u>50</u> |
| <u>Chloroethane</u> 75-00-3 3,000 | Chloroethane | <u>75-00-3</u> | <u>3,000</u> |
| <u>Chloroform</u> <u>67-66-3</u> <u>70</u> | Chloroform | <u>67-66-3</u> | <u>70</u> |
| <u>Chloromethane</u> <u>74-87-3</u> 3 | Chloromethane | 74-87-3 | 3 |
| <u>2-Chlorophenol</u> <u>95-57-8</u> <u>0.4</u> | 2-Chlorophenol | <u>95-57-8</u> | 0.4 |
| <u>2-Chlorotoluene</u> <u>95-49-8</u> <u>100</u> | 2-Chlorotoluene | <u>95-49-8</u> | <u>100</u> |
| <u>4-Chlorotoluene</u> <u>106-43-4</u> <u>24</u> | 4-Chlorotoluene | 106-43-4 | <u>24</u> |

68 8 of 13

| Chromium | 7440-47-3 | <u>10</u> |
|---|------------------------|---------------------|
| Chrysene | <u>218-01-9</u> | 5 |
| Cobalt | <u>7440-48-4</u> | 1 |
| Coliform organisms (total) | No CAS Registry Number | <u>1 per 100 mL</u> |
| Color | No CAS Registry Number | 15 color units |
| Copper | 7440-50-8 | 1,000 |
| Cyanide (free cyanide) | <u>57-12-5</u> | <u>70</u> |
| 2,4-D (2,4-dichlorophenoxy acetic acid) | <u>94-75-7</u> | <u>70</u> |
| <u>Dalapon</u> | <u>75-99-0</u> | <u>200</u> |
| DDD | <u>72-54-8</u> | <u>0.1</u> |
| <u>DDE</u> | <u>72-55-9</u> | <u>0.1</u> |
| DDT | 50-29-3 | <u>0.1</u> |
| Dibenz(a,h)anthracene | 53-70-3 | 0.005 |
| 1,4-Dibromobenzene | <u>106-37-06</u> | <u>70</u> |
| <u>Dibromochloromethane</u> | 124-48-1 | 0.4 |
| 1,2-Dibromo-3-chloropropane | <u>96-12-8</u> | <u>0.04</u> |
| Dibutyl phthalate | 84-74-2 | <u>700</u> |
| Dichloroacetic acid | <u>79-43-6</u> | 0.7 |
| 1,2-Dichlorobenzene | <u>95-50-1</u> | <u>20</u> |
| 1,3-Dichlorobenzene | <u>541-73-1</u> | <u>200</u> |
| 1,4-Dichlorobenzene | 106-46-7 | 6 |
| <u>Dichlorodifluoromethane</u> | <u>75-71-8</u> | 1,000 |
| 1,1-Dichloroethane | <u>75-34-3</u> | 6 |
| 1,2-Dichloroethane | <u>107-06-2</u> | <u>0.4</u> |
| 1,2-Dichloroethene (cis) | 156-59-2 | <u>70</u> |
| 1,2-Dichloroethene (trans) | <u>156-60-5</u> | <u>100</u> |
| 1,1-Dichloroethylene | <u>75-35-4</u> | <u>350</u> |
| 2,4-Dichlorophenol | <u>120-83-2</u> | 0.98 |
| 1,2-Dichloropropane | <u>78-87-5</u> | <u>0.6</u> |
| 1,3-Dichloropropene (cis and trans isomers) | <u>542-75-6</u> | <u>0.4</u> |
| <u>Dieldrin</u> | <u>60-57-1</u> | 0.002 |
| <u>Diethylphthalate</u> | 84-66-2 | <u>6,000</u> |
| 2.4-Dimethylphenol | <u>105-67-9</u> | <u>100</u> |
| 2,4-Dinitrotoluene | <u>121-14-2</u> | 0.05 |
| 2,6-Dinitrotoluene | <u>606-20-2</u> | 0.05 |

| Di-n-octyl phthalate | <u>117-84-0</u> | <u>100</u> |
|--|------------------------|--------------------|
| Dinoseb | <u>88-85-7</u> | 7 |
| 1,4-Dioxane | <u>123-91-1</u> | 3 |
| <u>Dioxin (2,3,7,8-TCDD)</u> | <u>1746-01-6</u> | <u>0.0002 ng/L</u> |
| 1,1-Diphenyl | <u>92-52-4</u> | 400 |
| Diphenyl ether | <u>101-84-8</u> | <u>180</u> |
| Diquat | <u>85-00-7</u> | <u>20</u> |
| Dissolved solids (total) | No CAS Registry Number | 500,000 |
| <u>Disulfoton</u> | <u>298-04-4</u> | <u>0.3</u> |
| Diundecyl phthalate (Santicizer 711) | <u>3648-20-2</u> | <u>100</u> |
| Endosulfan | <u>115-29-7</u> | <u>40</u> |
| Endosulfan sulfate | <u>115-29-7</u> | <u>40</u> |
| <u>Endothall</u> | 145-73-3 | <u>100</u> |
| Endrin, total (includes endrin, endrin aldehyde, and endrin ketone) | 72-20-8 | 2 |
| <u>Epichlorohydrin</u> | <u>106-89-8</u> | 4 |
| Ethyl acetate | <u>141-78-6</u> | <u>3,000</u> |
| Ethylbenzene | <u>100-41-4</u> | <u>600</u> |
| Ethylene dibromide | <u>106-93-4</u> | 0.02 |
| Ethylene glycol | <u>107-21-1</u> | <u>10,000</u> |
| Fluoranthene | <u>206-44-0</u> | <u>300</u> |
| Fluorene | <u>86-73-7</u> | <u>300</u> |
| Fluoride | <u>16984-48-8</u> | 2,000 |
| Foaming agents | No CAS Registry Number | <u>500</u> |
| <u>Formaldehyde</u> | <u>50-00-0</u> | <u>600</u> |
| Gross alpha (adjusted) particle activity (excludes radium-226 and uranium) | <u>12587-46-1</u> | <u>15 pCi/L</u> |
| <u>Heptachlor</u> | <u>76-44-8</u> | 0.008 |
| Heptachlor epoxide | <u>1024-57-3</u> | 0.004 |
| <u>Heptane</u> | <u>142-82-5</u> | 400 |
| <u>Hexachlorobenzene</u> | <u>118-74-1</u> | 0.02 |
| <u>Hexachlorobutadiene</u> | <u>87-68-3</u> | 0.4 |
| Hexachlorocyclohexane isomers (technical grade) | 608-73-1 | 0.02 |
| <u>alpha-Hexachlorocyclohexane</u> | <u>319-84-6</u> | 0.006 |
| <u>beta-Hexachlorocyclohexane</u> | <u>319-85-7</u> | 0.02 |
| gamma-Hexachlorocyclohexane (Lindane) | <u>58-89-9</u> | 0.03 |
| <u>n-Hexane</u> | 110-54-3 | <u>400</u> |

70 10 of 13

| Indeno(1,2,3-cd)pyrene | <u>193-39-5</u> | 0.05 |
|---|--|----------------------------|
| <u>Iron</u> | <u>7439-89-6</u> | 300 |
| Isophorone | <u>78-59-1</u> | <u>40</u> |
| Isopropyl ether | 108-20-3 | <u>70</u> |
| Isopropylbenzene | <u>98-82-8</u> | <u>70</u> |
| 4-Isopropyltoluene | <u>99-87-6</u> | <u>25</u> |
| Lead | <u>7439-92-1</u> | <u>15</u> |
| Manganese | <u>7439-96-5</u> | <u>50</u> |
| Mercury | <u>7439-97-6</u> | 1 |
| <u>Methanol</u> | <u>67-56-1</u> | 4,000 |
| Methoxychlor | <u>72-43-5</u> | <u>40</u> |
| Methylene chloride | <u>75-09-2</u> | 5 |
| Methyl butyl ketone | <u>591-78-6</u> | <u>40</u> |
| Methyl ethyl ketone | <u>78-93-3</u> | 4,000 |
| Methyl isobutyl ketone | <u>108-10-1</u> | <u>100</u> |
| Methyl methacrylate | <u>80-62-6</u> | <u>25</u> |
| 1-Methylnapthalene | 90-12-0 | 1 |
| 2-Methylnaphthalene | <u>91-57-6</u> | <u>30</u> |
| 2-Methylphenol | <u>95-48-7</u> | <u>400</u> |
| 3-Methylphenol | <u>108-39-4</u> | <u>400</u> |
| 4-Methylphenol | <u>106-44-5</u> | <u>40</u> |
| Methyl tert-butyl ether (MTBE) | <u>1634-04-4</u> | <u>20</u> |
| <u>Naphthalene</u> | 91-20-3 | 6 |
| <u>Nickel</u> | 7440-02-0 | <u>100</u> |
| Nitrate (as N) | <u>14797-55-8</u> | 10,000 |
| Nitrite (as N) | <u>14797-65-0</u> | 1,000 |
| N-nitrosodimethylamine | <u>62-75-9</u> | 0.0007 |
| <u>Oxamyl</u> | 23135-22-0 | 200 |
| <u>Pentachlorophenol</u> | <u>608-93-5</u> | 0.3 |
| [Perfluorooctane sulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA), total] | [1763 23 1 (PFOS); 335 67 1 (PFOA)] | [0.07] |
| Petroleum aliphatic carbon fraction class (C5 – C8) | No CAS Registry Number | 400 |
| Petroleum aliphatic carbon fraction class (C9 – C18) | No CAS Registry Number | <u>700</u> |
| Petroleum aliphatic carbon fraction class (C19 – C36) | No CAS Registry Number | 10,000 |
| Petroleum aromatics carbon fraction class (C9 – C22) | No CAS Registry Number | <u>200</u> |
| <u>pH</u> | No CAS Registry Number | <u>6.5 - 8.5 (no unit)</u> |

| <u>Phenanthrene</u> | <u>85-01-8</u> | <u>200</u> |
|---------------------------------------|------------------|--------------|
| Phenol | <u>108-95-2</u> | <u>30</u> |
| <u>Phorate</u> | <u>298-02-2</u> | 1 |
| n-Propylbenzene | <u>103-65-1</u> | <u>70</u> |
| Propylene glycol | <u>57-55-6</u> | 100,000 |
| Pyrene | <u>129-00-0</u> | <u>200</u> |
| Selenium | <u>7782-49-2</u> | <u>20</u> |
| Silver | 7440-22-4 | <u>20</u> |
| Simazine | 122-34-9 | 4 |
| Strontium | <u>7440-24-6</u> | <u>2,000</u> |
| Styrene | <u>100-42-5</u> | <u>70</u> |
| Sulfate | 14808-79-8 | 250,000 |
| 1,2,4,5-Tetrachlorobenzene | <u>95-94-3</u> | <u>2</u> |
| 1,1,2,2-Tetrachloroethane | <u>79-34-5</u> | 0.2 |
| 1,1,1,2-Tetrachloroethane | <u>630-20-6</u> | 1 |
| Tetrachloroethylene (PCE) | 127-18-4 | 0.7 |
| 2,3,4,6-Tetrachlorophenol | <u>58-90-2</u> | 200 |
| <u>Thallium</u> | 7440-28-0 | 2 |
| <u>Tin (inorganic forms)</u> | <u>7440-31-5</u> | <u>2,000</u> |
| Toluene | 108-88-3 | 600 |
| <u>Toxaphene</u> | 8001-35-2 | 0.03 |
| 2,4,5-TP (Silvex) | <u>93-72-1</u> | <u>50</u> |
| 1,2,4-Trichlorobenzene | 120-82-1 | <u>70</u> |
| 1,1,1-Trichloroethane | <u>71-55-6</u> | 200 |
| 1,1,2-Trichloroethane | <u>79-00-5</u> | 0.6 |
| Trichloroethylene (TCE) | <u>79-01-6</u> | 3 |
| Trichlorofluoromethane | <u>75-69-4</u> | 2,000 |
| 2,4,5-Trichlorophenol | <u>95-95-4</u> | <u>63</u> |
| 2,4,6-Trichlorophenol | <u>88-06-2</u> | 4 |
| 1,2,3-Trichloropropane | <u>96-18-4</u> | <u>0.005</u> |
| 1,2,4-Trimethylbenzene | <u>95-63-6</u> | <u>400</u> |
| 1,3,5-Trimethylbenzene | <u>108-67-8</u> | <u>400</u> |
| <u>Vanadium</u> | <u>7440-62-2</u> | 7 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | <u>76-13-1</u> | 200,000 |
| Vinyl chloride | <u>75-01-4</u> | 0.03 |

72 12 of 13

| Xylenes | <u>1330-20-7</u> | <u>500</u> |
|---------|------------------|--------------|
| Zinc | <u>7440-66-6</u> | <u>1,000</u> |

1 2 (i) Class GSA Standards. The standards for this class are the same as those for Class GA except as follows: 3 chloride: allowable increase not to exceed 100 percent of the natural quality concentration; and (1) 4 (2) dissolved solids (total): 1000 mg/L.1,000,000 μg/L. 5 (i) Class GC Standards. 6 (1) The concentrations of substances that, at the time of classification, exceed the standards applicable 7 to Class GA or GSA groundwaters shall not be caused to increase, nor shall the concentrations of 8 other substances be caused to exceed the GA or GSA standards as a result of further disposal of 9 contaminants to or beneath the surface of the land within the boundary of the area classified GC. 10 (2) The concentrations of substances that, at the time of classification, exceed the standards applicable 11 to GA or GSA groundwaters shall not be caused to migrate as a result of activities within the 12 boundary of the GC classification, so as to violate the groundwater or surface water quality standards 13 in adjoining waters of a different class. 14 Concentrations of specific substances, that exceed the established standard at the time of (3) 15 classification, are listed in Section .0300 of this Subchapter. 16 17 Authority G.S. 143-214.1; 143B-282(a)(2); History Note: Eff. June 10, 1979; 18 19 Amended Eff. November 1, 1994; October 1, 1993; September 1, 1992; August 1, 1989; 20 Temporary Amendment Eff. June 30, 2002; Amended Eff. August 1, 2002; 21 22 Temporary Amendment Expired February 9, 2003; 23 Amended Eff. April 1, 2013; January 1, 2010; April 1, 2005; 24 Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6,

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26

2018;

Amended Eff. January 1, 2022.

13 of 13 73