

15A NCAC 02B .0279 FALLS WATER SUPPLY NUTRIENT STRATEGY: WASTEWATER DISCHARGE REQUIREMENTS

The following is the NPDES wastewater discharge management strategy for the Falls of the Neuse Reservoir watershed (the Falls watershed):

- (1) **PURPOSE.** The purpose of this Rule is to establish minimum nutrient control requirements for point source wastewater discharges in the Falls watershed in order to restore and maintain water quality in the reservoir and protect its designated uses.
- (2) **APPLICABILITY.** This Rule applies to all wastewater treatment facilities discharging in the Falls watershed that receive nutrient-bearing wastewater and are subject to requirements for individual NPDES permits.
- (3) **DEFINITIONS.** For the purposes of this Rule, the definitions in 15A NCAC 02B .0276 and the following definitions apply:
 - (a) In regard to point source dischargers, treatment facilities, and wastewater flows and discharges,
 - (i) "Existing" means that which was subject to an NPDES permit as of December 31, 2006;
 - (ii) "Expanding" means that which has increased or will increase beyond its permitted flow as defined in this Rule; and
 - (iii) "New" means that which was not subject to an NPDES permit as of December 31, 2006.
 - (b) "Limit" or "limitation," except when specified as a concentration limit, means the mass quantity of nitrogen or phosphorus that a discharger or group of dischargers is authorized through an NPDES permit to release into surface waters of the Falls watershed.
 - (c) "MGD" means million gallons per day.
 - (d) "Permitted flow" means the maximum monthly average flow authorized in a facility's NPDES permit as of December 31, 2006.
- (4) **INITIAL NUTRIENT ALLOCATIONS FOR EXISTING UPPER FALLS DISCHARGERS.** This Item establishes initial Stage I and Stage II nutrient allocations for existing dischargers in the Upper Falls watershed:
 - (a) Stage I nitrogen and phosphorus allocations for dischargers with permitted flows of 0.1 MGD or greater are as follows:

Facility Name	NPDES No.	Mass Allocations (pounds/year)	
		Total Nitrogen	Total Phosphorus
North Durham	NC0023841	97,665	10,631
SGWASA	NC0026824	22,420	2,486
Hillsborough	NC0026433	10,422	1,352

- (b) Stage I allocations for dischargers with permitted flows less than 0.1 MGD are equal to the Stage II allocations specified in Sub-Items (c) and (d) of this Item.
- (c) Stage II nitrogen and phosphorus allocations are as follows:

Discharger Subcategories	Mass Allocations (pounds/year)	
	Total Nitrogen	Total Phosphorus
Permitted flows \geq 0.1 MGD	97,617	5,438
Permitted flows $<$ 0.1 MGD	1,052	175

- (d) The Stage II allocations in Sub-Item (c) of this Item shall be divided among the existing dischargers in each subcategory in proportion to the dischargers' permitted flows as defined in this Rule, and the resulting nutrient allocations shall be assigned to each individual discharger.
- (5) **CHANGES IN NUTRIENT ALLOCATIONS.**
 - (a) The aggregate and individual nutrient allocations available to point source dischargers in the Falls watershed are subject to change:

- (i) Whenever the Commission, through rulemaking, revises the nutrient reduction targets in or pursuant to 15A NCAC 02B .0275 in order to ensure the protection of water quality in the reservoir and its tributaries or to conform with applicable state or federal requirements;
 - (ii) Whenever one or more point source dischargers acquires any portion of the nonpoint load allocations under the provisions in this Rule and 15A NCAC 02B .0282, Options for Offsetting Nutrient Loads; or
 - (iii) As the result of allocation transfers conducted between point sources or between point and nonpoint sources and in accordance with this Rule, provided that nutrient allocation can be transferred and applied only within the portion of the Falls watershed to which it was originally assigned (Upper or Lower).
- (b) In the event that the Commission changes any nutrient reduction target specified in 15A NCAC 02B .0275 or in Item (4) of this Rule, the Commission shall also re-evaluate the apportionment among the dischargers and shall revise the individual allocations as necessary.
- (6) **NUTRIENT DISCHARGE LIMITATIONS FOR EXISTING UPPER FALLS DISCHARGERS.**
- (a) Beginning with calendar year 2016, any existing discharger with a permitted flow of 0.1 MGD or greater shall limit its total nitrogen and phosphorus discharges to its active, individual Stage I allocations as defined or modified pursuant to this Rule.
 - (b) Beginning with calendar year 2036, except as provided in Sub-item (d) of this Item, each existing discharger with a permitted flow greater than or equal to 0.1 MGD shall limit its total nitrogen and phosphorus discharges to its active, individual Stage II allocations as defined or modified pursuant to this Rule.
 - (c) Not later than March 15, 2011, the Director shall notify existing permittees of the individual Stage I and Stage II nutrient allocations initially assigned to them pursuant to this Rule.
 - (d) Not later than January 15, 2027, each existing discharger with a permitted flow greater than or equal to 0.1 MGD shall submit to the Division a plan for meeting its Stage II mass limitations. The plan shall describe the discharger's strategy for complying with the limitations and shall include a schedule for the design and construction of facility improvements and for the development and implementation of related programs necessary to the strategy. If a discharger determines that it cannot meet its limitations by calendar year 2036, the discharger may include its findings in the plan and request an extension of its compliance dates for the nitrogen and phosphorus limitations. This alternate plan shall document the compliance strategies considered and the reasons each was judged infeasible; identify the minimum loadings that are technically and economically feasible by 2036; and propose intermediate limits for the period beginning with 2036 and extending until the Stage II limitations can be met. Within 180 days of receipt, the Division shall approve the plan as submitted, which could include intermediate limits, or inform the discharger of any changes or additional information needed for approval. The Division shall incorporate the approved nitrogen and phosphorus mass limitations and compliance dates into the discharger's NPDES permit upon the next renewal or other major permit action following plan approval. If the Division extends the dates by which a discharger must meet Stage II limitations, the discharger shall update and submit its plan for Division approval every five years after the original submittal, and the Division shall take necessary and appropriate action as with the original plan, until the Stage II limitations are satisfied.
 - (e) It is the intent of this Item that all dischargers shall make continued progress toward complying with Stage II mass limitations. The Division shall not approve intermediate limitations that exceed either the applicable Stage I limitations or intermediate limitations previously approved pursuant to this Item.
- (7) **NUTRIENT DISCHARGE LIMITATIONS FOR EXISTING LOWER FALLS DISCHARGERS.**
- (a) Beginning with calendar year 2016, any existing discharger with a permitted flow of 0.1 MGD or greater shall limit its total nitrogen and phosphorus discharges as specified in this Item.
 - (b) **CONCENTRATION LIMITS.** The nitrogen and phosphorus discharge limits for existing dischargers shall be as follows:

Limit Type	Discharge Limits (milligrams/liter)	
	Total Nitrogen	Total Phosphorus
Monthly Average	8.0	1.0
Annual Average	5.5	0.5

Existing facilities must meet both monthly average and annual average limits in any given calendar year.

(c) **MASS LIMITS.**

- (i) In addition to the concentration limits specified in this Item, the collective annual mass discharge of total phosphorus shall not exceed 911 pounds in any calendar year.
- (ii) Any discharger may request a mass discharge limit in lieu of the concentration limit for nitrogen or phosphorus or both, in which case the Director shall set a limit equivalent to the annual average concentration limit at the facility's permitted flow. The resulting mass limit shall become effective with the ensuing calendar year or with calendar year 2016, whichever is later.

(8) **NUTRIENT CONTROL REQUIREMENTS FOR NEW DISCHARGERS.**

- (a) Any person proposing a new wastewater discharge in the Upper Falls watershed shall meet the following requirements prior to applying for an NPDES permit:
 - (i) Evaluate all practical alternatives to said discharge, pursuant to 15A NCAC 02H .0105(c)(2);
 - (ii) If the results of the evaluation support a new discharge, acquire sufficient nitrogen and phosphorus allocations for the discharge. The proponent may obtain allocation for the proposed discharge from existing dischargers pursuant to the applicable requirements of Item (10) of this Rule or obtain allocation from other sources to offset the increased nutrient loads resulting from the proposed discharge. The proponent may fund offset measures by making payment to the NC Ecosystem Enhancement Program contingent upon acceptance of payments by that program or to another seller of offset credits approved by the Division or may implement other offset measures contingent upon approval by the Division, either of which shall meet the requirements of Rule 15A NCAC 02B .0282. The amount of allocation or offsets obtained shall be sufficient for the duration of the discharge or for a period of 30 years, whichever is shorter. Payment for each allocation or offset shall be made prior to the ensuing permit issuance;
 - (iii) Determine whether the proposed discharge of nutrients will cause local water quality impacts; and
 - (iv) Provide documentation with its NPDES permit application demonstrating that the requirements of Sub-Items (a)(i) through (a)(iii) of this Item have been met.
- (b) The nutrient discharge limits for a new facility in the Upper Falls watershed shall not exceed the mass loads equivalent to a concentration of 3.0 milligrams per liter nitrogen or 0.1 milligrams per liter phosphorus at the permitted flow in the discharger's NPDES permit.
- (c) Upon the effective date of its NPDES permit, a new discharger in the Upper Falls watershed shall be subject to nitrogen and phosphorus limits not to exceed its active individual discharge allocations in any given calendar year.
- (d) The Director shall not issue an NPDES permit for any new wastewater facility that would discharge in the Lower Falls watershed and to which this Rule would apply.

(9) **NUTRIENT CONTROL REQUIREMENTS FOR EXPANDING DISCHARGERS.**

- (a) Any person proposing to expand an existing wastewater discharge in the Upper Falls watershed beyond its permitted flow shall meet the following requirements prior to applying for an NPDES permit:
 - (i) Evaluate all practical alternatives to said discharge, pursuant to 15A NCAC 02H .0105(c)(2);
 - (ii) If the results of the evaluation support an expanded discharge, acquire sufficient nitrogen and phosphorus allocations for the discharge. The proponent may obtain

allocation for the proposed discharge from existing dischargers pursuant to the applicable requirements of Item (10) of this Rule or obtain allocation from other sources to offset the increased nutrient loads resulting from the proposed discharge.

The proponent may fund offset measures by making payment to the NC Ecosystem Enhancement Program contingent upon acceptance of payments by that program or to another seller of offset credits approved by the Division or may implement other offset measures contingent upon approval by the Division, either of which shall meet the requirements of Rule 15A NCAC 02B .0282. The amount of allocation or offsets obtained shall be sufficient for the duration of the discharge or for a period of 30 years, whichever is shorter. Payment for each allocation or offset shall be made prior to the ensuing permit issuance;

- (iii) Determine whether the proposed discharge of nutrients will cause local water quality impact; and
 - (iv) Provide documentation with its NPDES permit application demonstrating that the requirements of Sub-Items (a)(i) through (a)(iii) of this Item have been met;
 - (b) The nutrient discharge limits for an expanding facility in the Upper Falls watershed shall not exceed the mass value equivalent to a concentration of 3.0 milligrams per liter nitrogen or 0.1 milligrams per liter phosphorus at the expanded flow limit in the discharger's NPDES permit; except that this provision shall not result in an active allocation or limit that is less than originally assigned to the discharger under this Rule.
 - (c) Upon expansion or upon notification by the Director that it is necessary to protect water quality, any discharger with a permitted flow of less than 0.1 MGD in the Upper Falls watershed, shall become subject to total nitrogen and total phosphorus permit limits not to exceed its active individual discharge allocations.
 - (d) The Director shall not issue an NPDES permit for the expansion of any wastewater discharge in the Lower Falls watershed to which this Rule applies.
- (10) ADDITIONAL PROVISIONS REGARDING NUTRIENT ALLOCATIONS AND LIMITATIONS.
- (a) Annual mass nutrient limits shall be established as calendar-year limits.
 - (b) Any discharger holding nutrient allocations pursuant to this Rule may by mutual agreement transfer all or part of its allocations to any new, existing, or expanding dischargers or to other person(s) in the Falls watershed, subject to the provisions of this Rule and the Falls nutrient strategy, except that allocation shall not be transferred between the Upper and Lower Falls watersheds.
 - (c) For NPDES compliance purposes, the enforceable nutrient limits for an individual facility or for a compliance association described in Item (11) of this Rule shall be the effective limits in the governing permit, regardless of the allocation held by the discharger or association.
 - (d) The Director may establish more stringent nitrogen or phosphorus discharge limits for any discharger upon finding that such limits are necessary to prevent the discharge from causing adverse water quality impacts on surface waters tributary to Falls Reservoir. The Director shall establish such limits through modification of the discharger's NPDES permit in accordance with applicable rules and regulations. When the Director does so, the discharger retains its nutrient allocations, and the non-active portion of the discharger's allocation becomes reserve allocation. The allocation remains in reserve until the Director determines that less stringent limits are allowable or until the allocation is applied to another discharge not subject to such water quality-based limits.
 - (e) In order for any transfer of allocation to become effective as a discharge limit in an individual NPDES permit, the discharger must request and obtain modification of the permit. Such request shall:
 - (i) Describe the purpose and nature of the modification;
 - (ii) Describe the nature of the transfer agreement, the amount of allocation transferred, and the dischargers or persons involved;
 - (iii) Provide copies of the transaction agreements with original signatures consistent with NPDES signatory requirements; and
 - (iv) Demonstrate to the Director's satisfaction that the increased nutrient discharge will not violate water quality standards in localized areas.

- (f) Changes in a discharger's nutrient limits shall become effective upon modification of its individual permit but no sooner than January 1 of the year following modification. If the modified permit is issued after January 1, the Director may make the limit effective on that January 1 provided that the discharger made acceptable application in a timely manner.
 - (g) REGIONAL FACILITIES. In the event that an existing discharger or group of dischargers accepts wastewater from another NPDES-permitted treatment facility and that acceptance results in the elimination of the discharge from the other treatment facility, the eliminated facility's nutrient allocations shall be transferred and added to the accepting discharger's allocations, except that allocation shall not be transferred between the Upper and Lower Falls watersheds.
- (11) GROUP COMPLIANCE OPTION.
- (a) Any facilities within the Upper or the Lower Falls watersheds may form a group compliance association to meet nutrient limits collectively within their respective portion of the Falls watershed. More than one group compliance association may be established in either portion of the watershed. No facility may be a co-permittee member of more than one association for any given calendar year.
 - (b) Any such association must apply for and shall be subject to an NPDES permit that establishes the effective nutrient limits for the association and for its members.
 - (c) No later than 180 days prior to the proposed date of a new association's operation or expiration of an existing association's NPDES permit, the association and its members shall submit an application for an NPDES permit for the discharge of nutrients to surface waters of the Falls watershed. The association's NPDES permit shall be issued to the association and its members. It shall specify the nutrient limits for the association and for each of its co-permittee members. Association members shall be deemed in compliance with the permit limits for nitrogen and phosphorus contained in their individually issued NPDES permits so long as they remain members in an association.
 - (d) An association's nitrogen and phosphorus limits shall be the sum of its members' individual active allocations for each nutrient plus any other active allocation obtained by the association or its members.
 - (e) The individual limits for each member in the association permit shall initially be equivalent to the discharge limits in effect in the member's NPDES permit. Thereafter, changes in individual allocations or limits shall be incorporated into the members' individual permits before they are included in the association permit.
 - (f) An association and its members may reapportion the individual allocations of its members on an annual basis. Changes in individual allocations or limits must be incorporated into the members' individual permits before they are included in the association permit.
 - (g) Changes in an association's nutrient limits shall become effective no sooner than January 1 of the year following permit modification. If the modified permit is issued after January 1, the Director may make the limit effective on that January 1 provided that the association made acceptable application in a timely manner.
 - (h) Beginning with the first full calendar year that the nitrogen or phosphorus limits are effective, an association that does not meet its permit limit for nitrogen or phosphorus for a calendar year shall, no later than May 1 of the year following the exceedance, make an offset payment to the NC Ecosystem Enhancement Program contingent upon acceptance of payments by that program or by implementing other load offsetting measures contingent upon approval by the Division, either of which shall meet the requirements of Rule 15A NCAC 02B .0282.
 - (i) Association members shall be deemed in compliance with their individual limits in the association NPDES permit for any calendar year in which the association is in compliance with its group limit for that nutrient. If the association fails to meet its limit, the association and the members that have failed to meet their individual nutrient limits in the association NPDES permit shall be deemed out of compliance with the association NPDES permit.

History Note: Authority G.S. 143-214.1; 143-214.5; 143-215; 143-215.1; 143-215.3(a)(1); 143-215B; 143B-282(c); 143B-282(d); S.L. 2005-190; S.L. 2006-259;

Eff. January 15, 2011 (this permanent rule replaces the temporary rule approved by the RRC on December 16, 2010).