

15A NCAC 02B .0713 NEUSE NUTRIENT STRATEGY: WASTEWATER DISCHARGE REQUIREMENTS

The following is the National Pollutant Discharge Elimination System (NPDES) wastewater discharge management strategy for the Neuse River Basin:

- (1) Purpose. The purpose of this Rule is to establish minimum nutrient control requirements for point source discharges in the Neuse River Basin in order to maintain or restore water quality in the Neuse River Estuary and protect its designated uses.
- (2) Applicability. This Rule applies to all discharges from wastewater treatment facilities in the Neuse River Basin that receive nitrogen-bearing wastewater and are required to obtain individual NPDES permits. Discharges in the Falls Lake watershed are subject to additional nutrient control requirements under the Falls Water Supply Nutrient Strategy Rules of this Subchapter.
- (3) Definitions. The terms used in this Rule shall be as defined in Rule .0701 of this Section and as follows:
 - (a) In regard to point source dischargers, treatment facilities, wastewater flows or discharges, or like matters:
 - (i) "Existing" means that which obtained an NPDES permit on or before December 31, 1995.
 - (ii) "Expanding" means that which increases beyond its permitted flow as defined in Sub-Item (3)(b) of this Rule.
 - (iii) "New" means that which had not obtained an NPDES permit on or before December 31, 1995.
 - (b) "Permitted flow" means the maximum monthly average flow authorized in a facility's NPDES permit as of December 31, 1995, with the following exceptions:

| Facility Name | NPDES No. | Permitted Flow (MGD) |
|---------------|-----------|----------------------|
| Benson | NC0020389 | 3.00 |
| Goldsboro | NC0023949 | 16.80 |
| Kenly | NC0064891 | 0.63 |
| Snow Hill | NC0020842 | 0.50 |
| Wilson | NC0023906 | 14.00 |

- (4) This Item specifies the nitrogen wasteload allocation for point sources.
 - (a) In accordance with the Nitrogen TMDL for the Neuse River Estuary, approved in 1999 by the US Environmental Protection Agency (EPA), the nitrogen wasteload allocation for point sources shall not exceed 1.64 million pounds per calendar year. The nitrogen wasteload allowance for point sources shall not exceed the nitrogen wasteload allocation plus any nutrient offset credits obtained in accordance with G.S. 143-214.26 and Rule .0703 of this Section.
 - (b) The Commission shall order future revisions in the Nitrogen TMDL and nitrogen wasteload allocation whenever necessary to ensure that water quality in the estuary meets all applicable standards in 15A NCAC 02B .0200 or to conform with applicable State or federal requirements.
- (5) This Item specifies the initial distribution of nitrogen discharge allocations for point sources.
 - (a) Until revised as provided elsewhere in this Rule, the following group and individual discharge allocations for total nitrogen shall apply in order to comply with the nitrogen wasteload allocation for point sources in Item (4) of this Rule:
 - (i) Dischargers with permitted flows less than 0.5 MGD shall be assigned collectively an annual discharge allocation of 138,000 pounds of total nitrogen.
 - (ii) Dischargers upstream of Falls Lake Dam and with permitted flows greater than or equal to 0.5 MGD shall be assigned collectively an annual discharge allocation of 443,700 pounds of total nitrogen.
 - (iii) Municipal dischargers downstream of Falls Lake Dam and with permitted flows greater than or equal to 0.5 MGD shall be assigned collectively an annual discharge allocation of 2,021,400 pounds of total nitrogen.

- (iv) Industrial dischargers downstream of Falls Lake Dam and with permitted flows greater than or equal to 0.5 MGD shall be assigned collectively an annual discharge allocation of 396,900 pounds of total nitrogen.
 - (v) Within each group in Sub-Items (i) - (iv) of this Item, each individual discharger shall be assigned an individual discharge allocation and the equivalent estuary allocation. Each discharger's discharge allocation shall be calculated as its permitted flow divided by the total permitted flow of the group, multiplied by the group discharge allocation.
 - (b) In the event that the nitrogen TMDL and its wasteload allocation for point sources are revised, as provided in Item (4) of this Rule, the Commission shall apportion the revised load among the existing facilities and shall revise discharge allocations as needed. The Commission may consider such factors as:
 - (i) fate and transport of nitrogen in the river basin;
 - (ii) technical feasibility and economic reasonableness of source reduction and treatment methods;
 - (iii) economies of scale;
 - (iv) nitrogen control measures already implemented;
 - (v) probable need for growth and expansion; and
 - (vi) incentives for nutrient management planning, utilities management, resource protection, and cooperative efforts among dischargers.
 - (6) This Item specifies nutrient controls for existing facilities.
 - (a) Beginning with calendar year 2003, each discharger with a permitted flow equal to or greater than 0.5 MGD shall be subject to a total nitrogen permit limit equal to the sum of its active individual discharge allocation, pursuant to Item (5) of this Rule, and any active allocation or nutrient offset credits acquired pursuant to Rule .0703 of this Section.
 - (b) All existing facilities below Falls Lake Dam with permitted flows greater than or equal to 0.5 MGD shall meet a quarterly average total phosphorus limit of 2 mg/L.
 - (c) The Director shall modify an existing facility's permit to establish more stringent limits for nitrogen or phosphorus upon finding that such limits are necessary to protect water quality standards in localized areas.
 - (7) This Item specifies nutrient controls for new facilities.
 - (a) New facilities proposing to discharge wastewater shall evaluate all practical alternatives to surface water discharge pursuant to 15A NCAC 02H .0105(c)(2) prior to submitting an application to discharge.
 - (b) New facilities submitting an application shall acquire, or demonstrate contractual agreement to acquire prior to authorization to discharge, nitrogen allocation from existing dischargers or nitrogen offset credits pursuant to Rule .0703 of this Section for the proposed discharge. The allocation and offset credits shall be sufficient for any partial calendar year in which the permit becomes effective plus 10 subsequent years of discharge at the proposed design flow rate in accordance with 15A NCAC 02H .0112(c).
 - (c) The Director shall not issue a permit authorizing discharge from a new facility unless the applicant has satisfied the requirements of Sub-Items (a), (b), and (e) of this Item. If a new facility's permit contains tiered flow limits for expansion, the Director shall not authorize an increased discharge unless the applicant has satisfied the requirements of Sub-Items (a), (b), and (e) of this Item for that discharge.
 - (d) The nitrogen discharge limit for a new facility shall not exceed the nitrogen load equivalent to its active allocation and offset credits, or the following technology-based mass limit, whichever is less:
 - (i) For facilities treating municipal or domestic wastewaters, the mass load equivalent to a concentration of 3.5 mg/L at the monthly average flow limit in the facility's NPDES permit; and
 - (ii) For facilities treating industrial wastewaters, the mass load equivalent to the best available technology economically achievable, calculated at the monthly average flow limit in the facility's NPDES permit.
 - (e) Subsequent applications for permit renewal or, where an existing permit contains tiered limits, requests to discharge at an increased flow shall demonstrate that the facility has

sufficient nitrogen allocation or offset credits to meet its effluent nutrient limitations for any partial calendar year in which the permit becomes effective plus 10 subsequent years of discharge at the proposed design flow rate.

- (f) New dischargers shall meet a monthly average total phosphorous limit of 1.0 mg/L.
 - (g) The Director shall establish more stringent limits for nitrogen or phosphorus upon finding that such limits are necessary to protect water quality standards in localized areas.
- (8) This Item specifies nutrient controls for expanding facilities.
- (a) Expanding facilities shall evaluate all practical alternatives to surface water discharge, pursuant to 15A NCAC 02H .0105(c)(2) prior to submitting an application to discharge.
 - (b) Facilities submitting application for increased discharge or, where an existing permit contains tiered limits, for authorization to discharge at an increased flow, shall acquire, or demonstrate contractual agreement to acquire prior to authorization to discharge at the increased flow, nitrogen allocation from existing dischargers or nitrogen offset credits pursuant to Rule .0703 of this Section, or both, for the proposed discharge. The allocation and offset credits shall be sufficient for any partial calendar year in which the permit becomes effective plus 10 subsequent years of discharge at the proposed design flow rate in accordance with 15A NCAC 02H .0112(c).
 - (c) The Director shall not issue a permit authorizing increased discharge from an existing facility unless the applicant has satisfied the requirements of Sub-Items (a), (b), and (e) of this Item. If a facility's permit contains tiered flow limits for expansion, the Director shall not authorize discharge at an increased flow unless the applicant has satisfied the requirements of Sub-Items (a), (b), and (e) of this Item.
 - (d) The nitrogen discharge limit for an expanded facility shall not exceed the nitrogen load equivalent to its active allocation and offset credits, or the following technology-based mass limit, whichever is less:
 - (i) For facilities treating municipal or domestic wastewaters, the mass equivalent to a concentration of 3.5 mg/L at the monthly average flow limit in the facility's modified NPDES permit, except that the limit shall be no less than the facility's original allocation per Item (5) of this Rule; and
 - (ii) For facilities treating industrial wastewaters, the mass equivalent to the best available technology economically achievable, calculated at the monthly average flow limit in the facility's modified NPDES permit.
 - (e) Subsequent applications for permit renewal or, where an existing permit contains tiered limits, requests to discharge at an increased flow shall demonstrate that the facility has sufficient nitrogen allocation or offset credits to meet its effluent nutrient limitations for any partial calendar year in which the permit becomes effective plus 10 subsequent years of discharge at the proposed design flow rate.
 - (f) Expanding facilities shall meet a monthly average total phosphorous limit of 1.0 mg/L unless they are a co-permittee member of a group compliance association described in Item (9) of this Rule, in which case they shall meet a quarterly average total phosphorus limit of 2.0 mg/L.
 - (g) The Director shall modify an expanding facility's permit to establish more stringent limits for nitrogen or phosphorus upon finding that such limits are necessary to protect water quality standards in localized areas.
- (9) This Item describes the option for dischargers to join a group compliance association to collectively meet nitrogen load limits.
- (a) Any or all facilities within the basin may form a group compliance association to meet nitrogen limits collectively. Any such association shall apply for and shall be subject to an NPDES group permit that establishes the effective total nitrogen limits, expressed as loads delivered to the estuary, for the association and for its members. More than one group compliance association may be established. No facility may be a co-permittee member of more than one association formed pursuant to this Rule at any given time.
 - (b) No later than 180 days prior to coverage under a new NPDES group permit, or expiration of an existing group permit, the association and its members shall submit an application for an NPDES permit for the discharge of total nitrogen to the surface waters of the

- Neuse River Basin. The NPDES group permit shall be issued to the association and its members as co-permittees.
- (c) An association's estuary limit of total nitrogen shall be the sum of its members' individual estuary allocations and nutrient offset credits plus any other estuary allocation and offset credits obtained by the association or its members pursuant to this strategy.
 - (d) An association and its members may reapportion their individual estuary allocations and nutrient offset credits on an annual basis. The NPDES group permit shall be modified to reflect the revised individual estuary allocations and limits.
 - (e) If an association does not meet its estuary limit in any year, it shall obtain nutrient offset credits in accordance with G.S. 143-214.26 to offset its mass exceedance no later than May 1 of the following year.
 - (f) Association members shall be deemed compliant with the permit limits for total nitrogen contained in their individually issued NPDES permits while they are members in an association. Association members shall be deemed compliant with their individual estuary limits in the NPDES group permit in any year in which the association is in compliance with its estuary limit. If the association exceeds its group limit, the association and any members that exceed their individual estuary limits in the NPDES group permit shall be deemed to be out of compliance with the group permit.
- (10) If an NPDES-permitted discharger or group of dischargers accepts wastewater from another NPDES-permitted treatment facility in the Neuse River Basin and that acceptance results in the elimination of the discharge from the treatment facility, the eliminated facility's total nitrogen estuary allocation shall be transferred and added to the accepting discharger's estuary allocation.

History Note: Authority G.S. 143-214.1; 143-215; 143-215.1; 143-215.3(a)(1); S.L. 1995, c. 572; Temporary Adoption Eff. January 22, 1998; Eff. August 1, 1998; Temporary Amendment Eff. March 15, 2000; Temporary Amendment Expired on December 10, 2000; Amended Eff. April 1, 2003; Recodified from 15A NCAC 02B .0234 Eff. April 1, 2020; Readopted Eff. April 1, 2020.