

1 015A NCAC 02B .0270 is adopted with changes as published in 21:24 NCR 2297-2302 as follows:

2
3 **15A NCAC 02B .0270 JORDAN WATER SUPPLY NUTRIENT STRATEGY: WASTEWATER**
4 **DISCHARGE REQUIREMENTS**

5 The following is the ~~National Pollutant Discharge Elimination System (NPDES)~~NPDES wastewater discharge
6 management strategy for the B. Everett Jordan Reservoir ~~Watershed watershed, or Jordan watershed; to protect the~~
7 ~~water supply uses of Jordan Reservoir and of designated water supplies throughout the Jordan watershed:~~

8 (1) PURPOSE. The purpose of this Rule is to establish minimum nutrient control requirements for
9 point source wastewater discharges in the Jordan watershed in order to restore and maintain water
10 quality in the reservoir and its tributaries and protect their designated uses, including water supply.

11 ~~(1)(2) Applicability.~~APPLICABILITY. This Rule applies to all wastewater treatment facilities
12 discharging in the Jordan ~~Reservoir Watershed~~watershed that receive nutrient-bearing wastewater
13 and are ~~required to obtain~~subject to requirements for individual NPDES permits.

14 ~~(2)(3) Definitions.~~DEFINITIONS. For the purposes of this Rule, the following definitions apply:

15 (a) In regard to point source dischargers, treatment facilities, and wastewater flows ~~or and~~
16 ~~discharges, or like matters,~~

17 (i) "Existing" means that which ~~obtained or~~was subject to a NPDES permit ~~on or~~
18 ~~before as of~~ December 31, ~~2001-2001;~~

19 (ii) "Expanding" means that which has increased or will increase beyond
20 its permitted flow as defined in this ~~Rule.~~Rule; and

21 (iii) "New" means that which ~~had not obtained or~~was not subject to a NPDES permit
22 ~~on or before as of~~ December 31, 2001.

23 ~~(b) "Delivered", as in delivered allocation, load, or limit, means the allocation, load, or limit~~
24 ~~that is measured or predicted at the Jordan Reservoir. A delivered value is equivalent~~
25 ~~to a discharge value multiplied by its assigned transport factor.~~

26 ~~(c) "Discharge", as in discharge allocation, load, or limit means the allocation, load, or limit~~
27 ~~that is measured at the point of discharge into surface waters in the Jordan Reservoir~~
28 ~~Watershed. A discharge value is equivalent to a delivered value divided by its~~
29 ~~assigned transport factor.~~

30 ~~(d) "MGD" means million gallons per day.~~

31 (b) "Active" allocation means that portion of an allocation that has been applied toward
32 and is expressed as a nutrient limit in an individual NPDES permit. Allocation that is
33 held but not applied in this way is "reserve" allocation.

34 ~~(d) "Allocation" means the mass quantity, as of nitrogen or phosphorus, that a discharger or~~
35 ~~group of dischargers is potentially allowed to release into surface waters of the Jordan~~
36 ~~Reservoir Watershed. Allocations may be expressed as "delivered allocation" or as~~

~~the equivalent “discharge allocation.” Possession of allocation does not authorize the discharge of nutrients but is prerequisite to such authorization in a NPDES permit.~~

~~(f)(c)~~ “Limit” means the mass ~~quantity~~quantity, as of nitrogen or ~~phosphorus~~phosphorus that a discharger or group of dischargers is authorized through a NPDES permit to release into surface waters of the Jordan ~~Reservoir Watershed~~watershed. Limits are enforceable and may be expressed as “delivered limit” or as the equivalent “discharge limit.”

~~(f)~~“Load” means the actual mass ~~quantity, as~~ of nitrogen or phosphorus, that a discharger or group of dischargers releases into surface waters of the Jordan Reservoir Watershed. Loads may be expressed as “delivered load” or as the equivalent “discharge load.”

~~(g)~~“Nutrients” means total nitrogen and total phosphorus.

~~(h)~~“Nutrient load allocation” or “load allocation” means the aggregate allocation of nitrogen or phosphorus for all nonpoint sources in the watershed or any of its subwatersheds. The load allocations are expressed as delivered allocations.

~~(i)~~“Nutrient wasteload allocation” or “wasteload allocation” means the aggregate allocation of nitrogen or phosphorus for all point source dischargers in the watershed or any of its subwatersheds. The wasteload allocations are expressed as delivered allocations.

~~(d)~~ “MGD” means million gallons per day.

~~(k)(e)~~ “Permitted flow” means the maximum monthly average flow authorized in a facility’s NPDES permit as of December 31, 2001, with the following exceptions:

Facility Owner	Facility Name	NPDES Permit	Permitted Flow (MGD)
B. E. Jordan & Son, LLC	Saxapahaw B. E. Jordan & Son	WWTP NC0042528	0.036
Durham County	Triangle WWTP	NC0026051	12.0
Ferrington Util. Utilities, Inc.	Ferrington Util. Village	WWTP NC0043559	0.5
Greensboro, City of	T.Z. Osborne WWTP	NC0047384	40.0
Mervyn R. King	Countryside Manor WWTP	NC0073571	0.03
OWASA	Mason Farm WWTP	NC0025241	14.5
Pittsboro, Town of	Pittsboro WWTP	NC0020354	2.25
Quarterstone Farm HOA Assoc.	Quarterstone Farm WWTP	NC0066966	0.2
Whippoorwill LLC Aqua North Carolina, Inc.	Carolina Meadows Carolina Meadows	WWTP Chatham WRF	NC0056413
			0.35

(f) "Reserve" allocation means allocation that is held by a permittee or other person but which has not been applied toward and is not expressed as a nutrient limit in an individual NPDES permit. Allocation that has been applied and expressed in this way is "active" allocation.

~~(k)"Total nitrogen" or "nitrogen" means the sum of the organic, nitrate, nitrite, and ammonia forms of nitrogen as in a water or wastewater.~~

~~(l)"Total phosphorus" or "phosphorus" means the sum of the orthophosphate, polyphosphate, and organic forms of phosphorus as in a water or wastewater.~~

~~(m)"Transport factor" means the fraction of the total nitrogen or total phosphorus in a discharge that is predicted to be delivered to the reservoir.~~

~~(3)(4)~~ This Item ~~specifies~~ provides for the initial division of nutrient wasteload allocations ~~for among~~ point source dischargers under this strategy.

(a) The delivered wasteload allocations of nitrogen and phosphorus assigned to point source dischargers collectively in each of the Jordan Reservoir subwatershed ~~subwatersheds~~, as set out in Rule 15A NCAC 2B .0262(4), shall equal ~~the loading targets specified in 15A NCAC 02B .0262.~~

~~(b)~~The initial allocations shall be divided as follows:

Subwatershed and Discharger Subcategories	Delivered Allocations (lb/yr)	
	Total Nitrogen	Total Phosphorus
Upper New Hope Arm		
Permitted flows ≥ 0.1 MGD	332,467 332,466	22,498
Permitted flows < 0.1 MGD	3,613	608
Lower New Hope Arm		
Permitted flows ≥ 0.1 MGD	6,836	498
Permitted flows < 0.1 MGD	0	0
Haw River Arm		
Permitted flows ≥ 0.1 MGD	881,757	104,004
Permitted flows < 0.1 MGD	13,370	1,996

~~(e)(b) INDIVIDUAL DELIVERED ALLOCATIONS.~~The nutrient allocations in Sub-Item ~~(b)(a)~~ of this Item shall be apportioned among the existing dischargers in each subcategory in proportion to the dischargers' permitted flows and the resulting delivered nutrient allocations assigned to each individual discharger.

~~(4)(5)~~ This Item describes allowable changes in nutrient allocations.

(a) The aggregate and individual nutrient allocations available to point source dischargers in the Jordan ~~Reservoir Watershed~~ watershed are subject to change:

- 1 (i) ~~Whenever, as provided in 02B .0262,~~ Whenever the ~~Commission~~Commission,
2 through rulemaking, revises the wasteload allocations in 15A NCAC 02B .0262
3 in order to ensure that the protection of water quality in the reservoir and its
4 tributaries meets all standards in 15A NCAC 02B .0200 or to conform with
5 applicable state or federal requirements;
- 6 (ii) Whenever one or more point source dischargers acquires any portion of the
7 nutrient nonpoint load allocations ~~is acquired by one or more point source~~
8 ~~dischargers~~ under the provisions in this Rule, and 15A NCAC 02B ~~-.0240, and~~
9 02B .0269; 0273, Options for Offsetting Nutrient Loads; and
- 10 (iii) As the result of allocation transfers between point sources or between point and
11 nonpoint sources, ~~as provided elsewhere in this Jordan Reservoir Strategy,~~
12 except that any nutrient allocation can ~~only~~ be transferred and applied only
13 within its assigned ~~subwatershed~~subwatershed; or

14 (iv) Any allocation is valid only in the subwatershed for which it is first established.

- 15 (b) In the event that the Commission ~~revises~~changes any nutrient wasteload allocation
16 specified in 15A NCAC 02B .0262 or Item (34) of this Rule, the Commission shall
17 also re-evaluate the apportionment among the dischargers and shall revise the
18 individual allocations as necessary. ~~The Commission may consider such factors as~~
19 ~~nutrient control measures already implemented; transfers of allocation already~~
20 ~~effected; probable need for growth and expansion; fate and transport of nitrogen in the~~
21 ~~river basin; technical feasibility and economic reasonableness of source reduction and~~
22 ~~treatment methods; economies of scale; incentives for responsible planning, utilities~~
23 ~~management, resource protection, and cooperative efforts among dischargers; and~~
24 ~~other factors it deems relevant.~~

25 (5)(6) This Item ~~specifies~~identifies nutrient ~~controls for discharges from~~control requirements specific to
26 existing discharges.

- 27 (a) Beginning with the first full calendar year following the effective date of this Rule,
28 any existing discharger with a permitted flow of 0.1 MGD or greater shall limit its
29 total phosphorus discharge to its active individual discharge allocation as defined or
30 modified pursuant to this Rule.

- 31 (a)(b) No later than six months ~~from~~after the effective date of this Rule, each existing
32 discharger with a permitted ~~flow~~flows greater than or equal to 0.1 MGD shall evaluate
33 its treatment facilities and operations and identify further opportunities to improve and
34 optimize ~~nutrient-nitrogen~~ reduction in the existing facilities beyond those previously
35 implemented pursuant to G.S. 143-215.1B(d); and shall submit a report to the
36 Division documenting its findings, ~~proposed actions,~~proposing optimization
37 measures, and describing expected results. No later than six months following

1 Division acceptance of the report, or as provided in the acceptance, the discharger
2 shall implement the proposed measures. No later than one year after the effective date
3 of this Rule, Beginning one year following Division acceptance of the report and
4 continuing through the fifth calendar year after the effective date of this Rule, each
5 such discharger shall submit a progress report to the ~~division~~Division documenting
6 the status of the proposed measures ~~taken~~ and the ~~nutrient-nitrogen~~ reductions
7 achieved at the facility. Each discharger shall continue these optimization measures
8 indefinitely.

9 (b)(c) Beginning with the fifth full calendar year ~~2016, after the effective date of this Rule,~~
10 any each existing discharger with a permitted flow equal to or greater than or equal to
11 0.1 MGD shall be subject to limit its total nitrogen permit limits discharge to its active
12 individual discharge allocation as defined or modified pursuant to not to exceed its
13 individual discharge allocations, pursuant to Item (3) of this Rule.

14 (d) Not later than 45 days after the effective date of this Rule, the Director shall notify
15 existing permittees of the individual nitrogen and phosphorus allocations assigned
16 according to Item (4) of this Rule and shall further notify each permittee, pursuant to
17 15A NCAC 02H .0114, of the Division's intent to modify the permittee's NPDES
18 permit to incorporate nitrogen and phosphorus limits pursuant to the requirements set
19 out in this rule and in accordance with applicable rules and regulations.

20 (e) Beginning with the first full calendar year after the effective date of the rule, any discharger
21 with a permitted flow equal to or greater than 0.1 MGD shall be subject to total
22 phosphorus permit limits not to exceed its individual discharge allocations, pursuant
23 to Item (3) of this Rule.

24 (d) The Director shall establish more stringent limits for nitrogen or phosphorus upon finding
25 that such limits are necessary to protect water quality standards in localized areas.

26 (6)(7) This Item specifies identifies nutrient ~~controls for~~control requirements specific to new discharges.

27 (a) Any person proposing a new wastewater discharge to surface waters shall meet the
28 following requirements prior to applying for an NPDES permit:

29 (i) Evaluate all practical alternatives to said discharge, pursuant to 15A NCAC 2H
30 .0105(c)(2);

31 (ii) If the results of the evaluation support a new discharge, acquire sufficient
32 nitrogen and phosphorus allocations for the discharge. Make every reasonable
33 effort to The proponent may obtain allocation for the proposed discharge from
34 existing ~~dischargers- dischargers~~ dischargers pursuant to the applicable requirements of Item
35 (9) of this Rule or employ measures to offset the increased nutrient loads
36 resulting from the proposed discharge. If it cannot acquire the necessary
37 allocation from existing facilities, the The proponent may fund offset measures

1 by making payment to the NC Ecosystem Enhancement Program contingent
2 upon acceptance of payments by that Program, or implement other offset
3 measures contingent upon approval by the Division, either of which shall meet
4 the requirements of rule 15A NCAC 02B .0273. The offsets shall be of an
5 amount equivalent to the allocations required purchase a portion of the nonpoint
6 source load allocation for a period of 30 years, years at the rate set in 15A NCAC
7 02B .0240 to implement practices designed to offset the loading created by the
8 new facility. Payment for each 30-year portion of the nonpoint source load
9 allocation shall be made prior to the ensuing permit issuance;

10 (iii) Determine whether the proposed discharge of nutrients will cause local water
11 quality impacts; and

12 (iv) Provide documentation with its NPDES permit application demonstrating that
13 the requirements of Sub-Items (i) ~~and through (ii)(iii)~~ of this Sub-Item have been
14 met.

15 (b) The nutrient discharge allocations and offsets for a new facility shall not exceed the
16 mass loads equivalent to a concentration of 3.0 mg/L nitrogen or 0.18 mg/L
17 phosphorus at the greatest monthly flow limit permitted flow in the discharger's
18 NPDES permit.

19 (c) Upon the effective date of its NPDES permit, a new discharger shall be subject to
20 nitrogen and phosphorus limits not to exceed its active individual discharge
21 allocations.

22 ~~(d)The Director shall establish more stringent limits for nitrogen or phosphorus upon finding~~
23 ~~that such limits are necessary to protect water quality standards in localized areas.~~

24 (7)(8) This Item ~~specifies identifies~~ nutrient ~~controls for~~ control requirements specific to expanding
25 discharges.

26 (a) Any person proposing to expand an existing wastewater discharge to surface waters
27 beyond its permitted flow as defined in this Rule shall meet the following
28 requirements prior to applying for an NPDES permit:

29 (i) Evaluate all practical alternatives to said discharge, pursuant to 15A NCAC 2H
30 .0105(c)(2);

31 (ii) If the results of the evaluation support an expanded discharge, acquire sufficient
32 nitrogen and phosphorus allocations for the discharge. Make every reasonable
33 effort to ~~The proponent may~~ obtain allocation for the proposed discharge from
34 existing ~~dischargers~~ dischargers pursuant to the applicable requirements of Item
35 (9) of this Rule or employ measures to offset the increased nutrient loads
36 resulting from the proposed discharge. If it cannot acquire the necessary
37 allocation from existing facilities, the ~~The~~ proponent may fund offset measures

1 by making payment to the NC Ecosystem Enhancement Program contingent
2 upon acceptance of payments by that Program or implement other offset
3 measures contingent upon approval by the Division, either of which shall meet
4 the requirements of rule 15A NCAC 02B .0273. The offsets shall be of an
5 amount equivalent to the allocations required ~~purchase a portion of the nonpoint~~
6 ~~source load allocation~~ for a period of 30 years years at the rate set in 15A NCAC
7 02B .0240 to implement practices designed to offset the loading created by the
8 ~~new facility.~~ Payment for each 30-year portion of the nonpoint source load
9 allocation shall be made prior to the ensuing permit issuance;

10 (iii) Determine whether the proposed discharge of nutrients will cause local water
11 quality impact; and

12 (iv) Provide documentation with its NPDES permit application demonstrating that
13 the requirements of Sub-Items (i) through ~~(ii)~~(iii) of this Sub-Item have been
14 met.

15 (b) The nutrient discharge ~~allocations~~ limits for an expanding facility shall not exceed the
16 greater of its nutrient allocations or the mass value equivalent to a concentration of 3.0
17 mg/L nitrogen or 0.18 mg/L phosphorus at the ~~greatest monthly flow limit~~permitted
18 flow in the discharger's NPDES ~~permit~~ permit except that this provision shall not
19 result in an allocation or limit that is less than originally assigned to the discharger
20 under this Rule.

21 (c) Upon expansion or upon notification by the Director that it is necessary to protect
22 water quality, any discharger with a permitted flow of less than 0.1 MGD, as defined
23 under this Rule, shall become subject to total nitrogen and total phosphorus permit
24 limits not to exceed its active individual discharge allocations.

25 ~~(e)The Director shall establish more stringent limits for nitrogen or phosphorus upon finding~~
26 ~~that such limits are necessary to protect water quality standards in localized areas.~~

27 ~~(8)(9)~~ This Item describes additional requirements regarding nutrient discharge limits for wastewater
28 facilities:

29 (a) Annual mass nutrient limits shall be established as calendar-year limits.

30 (b) Any point source discharger holding nutrient allocations under this Rule may by
31 mutual agreement transfer all or part of its allocations to any new, existing, or
32 expanding dischargers in the same Jordan ~~Reservoir Subwatershed~~ subwatershed or to
33 other person(s), subject to the ~~restrictions and requirements presented in this~~
34 Rule provisions of the Jordan nutrient strategy.

35 (c) For NPDES compliance purposes, the enforceable nutrient limits for an individual
36 facility or for a compliance association described in Item (10) shall be the effective

1 limits in the governing permit, regardless of the allocation held by the discharger or
2 association.

3 (d) The Director may establish more stringent nitrogen or phosphorus discharge limits for
4 any discharger upon finding that such limits are necessary to prevent the discharge
5 from causing adverse water quality impacts on surface waters other than an arm of
6 Jordan Reservoir as defined in Rule .0262(4) of this strategy. The Director shall
7 establish such limits through modification of the discharger's NPDES permit in
8 accordance with applicable rules and regulations. When the Director does so, the
9 discharger retains its nutrient allocations, and the non-active portion of the
10 discharger's allocation becomes reserve allocation. The allocation remains in reserve
11 until the director determines that less stringent limits are allowable or until the
12 allocation is applied to another discharge not subject to such water quality-based
13 limits.

14 (d)(e) In order for any transfer of allocation to become effective as a discharge limit in an
15 individual NPDES permit, the discharger must request and obtain modification of the
16 permit. Such request ~~must~~ shall:

- 17 (i) Describe the purpose and nature of the modification;
- 18 (ii) Describe the nature of the transfer agreement, the amount of allocation
19 transferred, and the dischargers or persons involved;
- 20 (iii) Provide copies of the transaction agreements with original signatures consistent
21 with NPDES signatory requirements; and
- 22 (iv) Demonstrate to the Director's satisfaction that the increased nutrient discharge
23 will not violate water quality standards in localized areas.

24 (e)(f) Changes in a discharger's nutrient limits shall become effective upon modification of
25 its individual permit but no sooner than January 1 of the year following modification.
26 If the modified permit is issued after January 1, the Director may make the limit
27 effective on that January 1 provided that the discharger made acceptable application
28 in a timely manner.

29 (f)(g) Regional Facilities. In the event that an existing discharger or group of dischargers
30 accepts wastewater from another NPDES-permitted treatment facility in the same
31 Jordan Reservoir-subwatershed and that acceptance results in the elimination of the
32 discharge from the other treatment facility, the eliminated facility's delivered nutrient
33 allocations shall be transferred and added to the accepting discharger's delivered
34 allocations.

35 (9)(10) This Item describes the option for dischargers to join a group compliance association to
36 collectively meet nutrient control requirements.

- 1 (a) Any or all facilities within the same Jordan ~~Reservoir~~ subwatershed may form a group
2 compliance association to meet delivered nutrient allocations collectively. More than
3 one group compliance association may be established in any subwatershed. No
4 facility may belong to more than one association at a time.
- 5 (b) Any such association must apply for and shall be subject to an NPDES permit that
6 establishes the effective nutrient limits for the association and for its members.
- 7 (c) No later than 180 days prior to the proposed date of a new association's operation or
8 expiration of an existing association's NPDES permit, the association and its
9 members shall submit an application for a NPDES permit for the discharge of
10 nutrients to ~~the~~ surface waters of the Jordan ~~Reservoir Watershed~~ watershed. The
11 association's NPDES permit shall be issued to the association and its members. It
12 shall specify the delivered nutrient limits for the association and for each of its co-
13 permittee members ~~and other requirements the Director deems appropriate~~.
14 Association members shall be deemed in compliance with the permit limits for
15 nitrogen and phosphorus contained in their individually issued NPDES permits so
16 long as they remain members in an association.
- 17 (d) An association's delivered nitrogen and phosphorus limits shall be the sum of its
18 members' individual active delivered allocations for each nutrient plus any other
19 active allocation obtained by the association or its members.
- 20 (e) The individual delivered allocations for each member in the association permit shall
21 initially be equivalent to the discharge limits in effect in the member's NPDES
22 permit. Thereafter, changes in individual allocations or limits must be incorporated
23 into the members' individual permits before they are included in the association
24 permit.
- 25 (f) An association and its members may reapportion the individual delivered allocations
26 of its members on an annual basis. Changes in individual allocations or limits must be
27 incorporated into the members' individual permits before they are included in the
28 association permit.
- 29 (g) Changes in nutrient limits shall become effective no sooner than January 1 of the year
30 following permit modification. If the modified permit is issued after January 1, the
31 Director may make the limit effective on that January 1 provided that the discharger
32 made acceptable application in a timely manner.
- 33 (h) Beginning with the first full calendar year ~~2016, that the nitrogen or phosphorus limits~~
34 are effective, an association that does not meet its permit limit for nitrogen or
35 phosphorus for a calendar year ~~shall~~ shall, no later than May 1 of the year following
36 the exceedance, make an offset payment to the NC Ecosystem Enhancement Program
37 contingent upon acceptance of payments by that Program or by implementing other

1 load offsetting measures contingent upon approval by the Division , either of which
2 shall meet the requirements of rule 15A NCAC 02B .0273,as provided and at the rate
3 set in 15A NCAC 02B .0240 no later than May 1 of the year following the
4 exceedence.

- 5 (i) Association members shall be deemed in compliance with their individual delivered
6 allocations limits in the association NPDES permit as long as for any calendar year in
7 which the association is in compliance with its delivered allocation limit. If the
8 association fails to meet its delivered allocation limit, the association and the members
9 that have failed to meet their individual delivered nutrient allocations limits in the
10 association NPDES permit will be out of compliance with the association NPDES
11 permit.

12 ~~(j)The Director shall establish more stringent limits for nitrogen or phosphorus upon finding~~
13 ~~that such limits are necessary to protect water quality standards in localized areas.~~

14
15 *History Note:* Authority G.S. 143-214.1; 143-214.5; 143-215; 143-215.1; 143-215.3(a)(1); ~~143-215.8B(b); 143-~~
16 ~~215B; 143B-282(c); 143B-282(d); S.L. 1995, c. 572; S.L. 2005-190; S.L. 2006-259;~~
17 *Eff. July 1, 2008.*