

Mr. Jimmie Overton
Hearing Officer
North Carolina Division of Water Quality
1617 Mail Service Center
Raleigh, NC 27699-1617

November 4, 2004

RE: Additional Comments in Opposition to the Town of Butner's Application to Modify Its NPDES Permit, No. NC0026824

Dear Mr. Overton:

We appreciate the opportunity to review and comment on the above-referenced NPDES permit application. We submit these comments on the NPDES permit application on behalf of the Neuse River Foundation and the Sierra Club. These comments are made in addition to comments we previously submitted to DWQ at the public hearing on September 23, 2004.

The Southern Environmental Law Center ("SELC") is a non-profit legal advocacy group dedicated to protecting the environment of the South. SELC works with more than 100 partner groups in six southeastern states. SELC has been actively involved in a variety of efforts to improve water quality in the Neuse River Basin, including work on improvements to nutrient management for the protection of surface water. To that end, we are closely involved with the efforts of the Neuse River Foundation and the Sierra Club to protect water quality and the environment in the entire Neuse River Basin.

The Neuse River Foundation is a private, non-profit advocacy organization headquartered in New Bern, North Carolina. It was founded in 1980 and is licensed by the Waterkeeper Alliance, an international group comprised of more than 119 Waterkeeper programs. The Waterkeeper program is an environmental "neighborhood watch" program: essentially, it is a citizen's patrol to protect communities and the waters on which they depend. The Neuse River Foundation currently has over 2,800 members throughout the Neuse River Basin in North Carolina. The Neuse River Foundation is dedicated to promoting the preservation, protection and restoration of the ecosystem of the Neuse Basin's rivers, lakes and creeks.

The Sierra Club is the nation's oldest grassroots environmental organization. Alone among environmental groups, it is organized at the national, regional, state and local levels. The North Carolina Chapter was formed in 1977, after having been part of the North/South Carolina LeConte Chapter since 1971. The North Carolina Chapter has 17,000 members in 13 local groups across the state. The mission of the Sierra Club is to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect the quality of the natural and human environment; and to use all lawful means to carry out these objectives.

The Neuse River Foundation previously submitted written comments on this proposed NPDES permit in June. These comments are meant to supplement those comments and any other comments made at the public hearing. These organizations have longstanding interests in protecting water quality in North Carolina and in the Neuse River Basin in particular. The Town of Butner's proposed wastewater treatment plant expansion directly impacts these objectives by degrading the water quality of Knap of Reeds Creek and Falls Lake and detrimentally impacting the environment. Thus, as discussed more fully below, we are writing to request that you deny the Town of Butner's request to modify its individual NPDES permit.

The Division of Water Quality ("DWQ") is required by statute to insure that NPDES permits protect water quality, public health, and the environment. *See* N.C. Gen. Stat. § 143-215.10C (a) (2004). The Butner draft NPDES permit does not adequately protect water quality, public health, and the environment. The draft permit authorizes the Butner WWTP's discharge of 119,729 lb/yr of nitrogen. In a letter dated July 7, 2004, and again at the September 23rd public hearing, DHHS and the Town of Butner asked DWQ to place more stringent effluent limits for nitrogen in the Butner WWTP's NPDES permit. Butner requested that the N allocation be limited to 79,908 lb/yr for 7.5 MGD flow which would bring the plant into compliance with the 3.5 mg/l N concentration permit requirement. The draft permit, however, has not been modified to reflect this request. While we support more stringent limits on the WWTP discharge, we still believe this expansion cannot take place even at the levels proposed by Butner & DHHS.

There are several major defects in Butner's permit application. The first defect in the proposed expansion is the lack of a complete and adequate environmental review under the North Carolina Environmental Protection Act ("SEPA"). In conducting the environmental assessment of the proposed expansion, Butner overlooked alternatives to the pollution trade, the impact of the trade itself, and cumulative impacts from the expansion. DWQ issued a Finding of No Significant Impact ("FONSI") based upon an environmental assessment that overlooked the environmental impacts to Falls Lake, the major drinking water supply for Raleigh. Butner clearly never evaluated the environmental impacts of the proposed trade because doing so would result in a finding that the trade will have significant environmental impacts. An environmental impact statement is required even if DWQ modifies the permit to the lower N allocation because of the likely detrimental impacts to water quality in Falls Lake. The second defect in the proposed expansion is the complete disregard for the N cap set out in the Neuse River TMDL implementing regulations. The regulations contain a cap on N discharges above Falls Lake that

will prevent this expansion from occurring even at the more stringent levels Butner and DHHS are now asking for in order to comply with N concentration requirements. The third major defect is that the proposed expansion will exacerbate already occurring violations of water quality standards.

I. The applicant failed to follow the requirements of SEPA in applying for this permit modification.

Under SEPA and DWQ regulations, applicants for NPDES permits must conduct an environmental assessment and an engineering alternatives analysis. *See* N.C. Gen. Stat. 113A-2 & -3; see also N.C. Admin. Code 15A, 02H .0105. If the proposed project is above certain minimum criteria determined by DWQ, an Environmental Assessment (“EA”) or an Environmental Impact Statement (“EIS”) must be prepared. N.C. Admin. Code 01, 25.0401 (a) (2004). The Butner WWTP prepared a joint EA and engineering alternatives analysis in January 2003. *See* N.C. Dept. of Health & Human Services, *Engineering Alternatives Analysis & Environmental Assessment for the Town of Butner Wastewater Treatment Plant Upgrade* (2003) (*hereinafter* “EAA/EA”) (on file with DENR). The EAA/EA was inadequate in many respects and resulted in a FONSI that was based in inadequate information. We offer the following comments on the EAA/EA in addition to the comments made in our September 23rd comment letter.

A. The EA/EAA fails to adequately address cumulative impacts resulting from the expanded WWTP discharge.

The EA/EAA fails to address the cumulative impacts of the proposed WWTP expansion. In the EA/EAA, DHHS states that this expansion is not likely to result in significant growth in Granville County. EAA/EA at 6-1. In a memorandum dated July 14, 2003, DHHS asserted that “there are very limited opportunities for private residential and commercial growth.” Memorandum from Michael L. McAllister to Alex Marks, DENR Division of Water Quality Planning Branch (July 14, 2003), attached as Exhibit A. Information presented by local government officials at the first public hearing on the proposed permit proved that assertion false. At that hearing, numerous local officials spoke about many opportunities the towns of Butner, Creedmoor, & Stem as well as the rest of Granville County have passed up due to their limited WWTP capacity.

“The NC Department of Commerce and all professional consultants will verify that this area of Granville County is one of the most desirable areas anywhere around the RTP to locate good industry. Every required item that is needed exists here except wastewater capacity... We currently has a 325 acre industrial park right...ready. But without wastewater capacity, it’s impossible”¹

Leon Turner, Director, Granville County Economic Development Commission, Statement at the Butner Public Hearing (September 23, 2004).

“The majority of southern Granville County is made up of undeveloped lands and without this increase of capacity much of this land will not support economic development...”²

“Our mean value of a house is half of what it is in Wake County. So the labor market from over there wants to live over here because they can afford to live over here. These developers want to come over here and develop because there is a market.”³

These statements are directly contradictory to statements made by DHHS. DHHS stated the proposed action “will not have any significant direct, secondary or cumulative impacts upon the environment.” EAA/EA at 6-1. Since Granville County will experience residential and industrial growth if wastewater treatment capacity is increased, DHHS is required by law to provide DWQ with an adequate assessment of the secondary and cumulative impacts. The cumulative impacts from the Butner WWTP expansion most likely to adversely affect water quality in Knap of Reeds Creek and Falls Lake are induced residential and industrial development. Increased stormwater runoff into the receiving waters in the Neuse River Basin will result from more development. DHHS attempted to discount cumulative impact concerns by referring to county zoning ordinances that may or may not apply in the service expansion area.

Section 05.231 of the County Ordinance states that all development within the watershed areas will be developed to minimize the concentrated storm water flow and the impact of stormwater runoff to receiving waters...There are no existing estimates of the portion of the watershed protected under this ordinance that would potentially fall into a community sewer service area provided treatment through the Town of Butner facilities. However, a casual review of the existing mapping...would indicate that as much as 15 percent might be developable with community sewer service.

Memorandum from Michael L. McAllister to Alex Marks, DENR Division of Water Quality Planning Branch (July 14, 2003) at pg. 7.

DHHS goes on to pass the buck on accounting for cumulative impacts to the service areas outside of Butner proper, such as the Towns of Creedmoor and Stem.

Butner has provided wastewater treatment capacity for the Town of Creedmoor and for the Cozart and Lyons Station Sanitary Districts for some time. Service is provided to each unit of local government on a negotiated basis for a specific daily flow capacity. Butner has no land use authority in these existing service areas outside the Butner reservation. Butner also has no specific authority regarding the areas into which each local government might elect to extend service.

² Kent Ray, Commission, City of Creedmoor, Statement at the Butner Public Hearing (September 23, 2004).

³ Rep. Jim Crawford, Granville County, Statement at the Butner Public Hearing (September 23, 2004).

Letter from Michael L. McAllister to Melba McGee, DENR Environmental Review Coordinator (October 1, 2003), attached as Exhibit B.

DHHS's inability to control development in its service areas does not mean that it can derogate its duty to disclose and assess the cumulative impacts of the WWTP expansion. Although DHHS & the Town of Butner have no control over zoning in Creedmoor and Stem, they do have the ability to condition additional flow to the WWTP on the adoption of stormwater controls in the service area. Considering the admitted cumulative impacts from proposed and anticipated development in Butner's service area, DWQ should prohibit Butner from providing service to areas that have not adopted the more stringent provisions of the Phase II Stormwater Rules or the Neuse Basinwide Stormwater regulations.

The information concerning the county ordinances and DHHS's lack of authority make a full assessment of cumulative impacts even more critical for insuring that water quality is protected. It is absolutely essential that DWQ have a complete picture of the potential for cumulative impacts before it makes a decision on this permit. DWQ has the authority to condition or deny an NPDES permit based on cumulative impact concerns. The only limitation on the agency in this regard is that the condition or denial must be necessary "to achieve and maintain for the citizens of the State a total environment of superior quality." N.C. Gen. Stat. § 143-211 (2004); 1996 N.C. AG LEXIS 34 (N.C. AG, 1996). DWQ must fully investigate the cumulative impacts of the Butner WWTP expansion by denying this permit application and requesting an environmental impact statement.

B. The EAA/EA fails to adequately address all reasonable alternatives to this expansion.

In addition to the reasonable alternatives outline in our September 23rd comments, we submit that Butner should have evaluated the use of deep bed filters. The omission of deep bed filters from the analysis serves an example of the inadequacy of Butner's EA/EAA. North Carolina law requires a full discussion of all reasonable alternatives to the proposed project. N.C. Gen. Stat. § 143-215.1(b)(5) mandates that

The Commission shall not issue a permit for a new municipal or domestic wastewater treatment works that would discharge to the surface waters of the State or for the expansion of an existing municipal or domestic wastewater treatment works that would discharge to the surface waters of the State unless the applicant for the permit demonstrates to the satisfaction of the Commission that the applicant has prepared an engineering, environmental, and fiscal analysis of alternatives to the proposed facility.

The EAA/EA failed completely to consider the alternative of upgrading the facility. The Butner WWTP is currently in a state of disrepair. In September 2003, TRC, the consultants for DHHS, submitted a report to DHHS on recommended improvements to the plant. *See* TRC, *Recommendations for Plant Improvements*, attached as exhibit C. The report revealed that the existing plant requires \$1.4 million worth of repairs in order to operate at the levels in the draft

permit. *Id.* The plant currently discharges 6.41 mg/l N at an average flow of 2.39 MGD. *Id.* The draft permit requires the WWTP to meet a concentration of 3.5 mg/l for N. The recommendations for meeting that limit discussed the option of installing “deep bed” filters to remove more N.

Other wastewater treatment facilities that have been reconstructed in the last two years in the Neuse River Basin, that utilize biological nutrient removal (BNR) processes, NCDENR has required the addition of ‘deep bed’ filters with a methanol feed for final de-nitrification...We believe that NCDENR may require some sort of supplemental treatment following BNR process for the function represented by the de-nitrification units. *Id.* at pg. 13.

The EAA/EA makes no mention of using deep bed filters to meet the current N allocation of 58,599 lb/yr although the technology has clearly been required by DWQ in the past. DHHS omitted a discussion of this technology as an alternative because it wanted to take the easier route of purchasing additional N allocation. Without an assessment of all reasonable technologies such as deep bed filters, how can DWQ or DHHS conclude that the purchase of additional N allocation is the most reasonable alternative? DWQ must deny this permit and require an environmental impact statement that will fully assess the alternatives to this expansion.

II. The increased N allocation must not result in a violation of the N cap for dischargers above Falls Lake.

The Neuse River Basin – Nutrient Sensitive Waters Management Strategy regulations specify N discharge allocations for point sources in different geographical areas of the Neuse River Basin. *See* N.C. Admin. Code 15A, 02B .0234 (2004). The regulations state that all group and individual discharge allocations for total N above the Falls Lake Dam “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.” N.C. Admin. Code 15A, 02B .0234(5) (a) (ii) (2004). The current allocations of the three dischargers above Falls Lake are near the cap of 443,700 pounds. *See* Neuse River Compliance Association NPDES permit number NC000001 (on file with DENR). DHHS recently asked DWQ to limit its N allocation to 79,908 lb/yr at 7.5 MGD. The increase will result in a net increase of 21,308 lb/yr of N. The cap does not support any increase in Butner’s N allocation if the dischargers above the lake are at their total N allocation. Therefore, any additional allocation of N to the Town of Butner would violate the cap. DWQ must abide by its own regulations and deny this permit. If DWQ chooses to change the cap, the agency will have to follow the procedures for adopting a permanent rule. *See* N.C. Gen. Stat. § 150B-21.2 (2004). These procedures will require the proposed change to go through public notice and comment before the cap could be amended. *See id.*

III. Increased N allocation must not result in a violation of the applicable water quality standard.

DWQ and DHHS cannot continue to rely on lake-wide averages of Falls Lake to condone this expansion. The upper segment of Falls Lake is classified as WS-IV, NSW, CA separate from the

rest of the lake which is classified as WS-IV, NSW, CA, B. The upper segment has experienced continuing violations of the chlorophyll a standard of 40 ug/l for lakes and reservoirs. *See* Monitoring Data for the Upper Segment of Falls Lake & Knap of Reeds Creek, attached as Exhibit D. DWQ obviously considered this segment by itself in assigning water quality classifications and sampling for water quality violations. DHHS and DWQ cannot ignore this information and simply average all of chlorophyll a levels in the lake in order to bypass any consideration of localized impacts. Falls Lake is 22 miles long. DWQ and DHHS cannot average all samples in the lake in order to make it appear that this expansion is protective of water quality, public health and the environment.

Furthermore, DWQ has a duty to specify controls for Butner's WWTP expansion which are stringent enough to end the continuing chlorophyll a violations in the upper segment of Falls Lake. N.C. Admin. Code 15A, 02B .0234 (8)(h) states "[t]he Director *shall establish* more stringent limits for nitrogen and phosphorus upon a finding that such limits are necessary to protect water quality standards in localized areas" where facilities are expanding. (emphasis added). The proposed increase Butner's N allocation will exacerbate the continuing violations water quality standards for chlorophyll a. DWQ has a duty to deny this permit and establish more stringent N limits in the WWTP's NPDES permit.

For all the reasons detailed above and in our September 23rd comment letter, DWQ must deny the permit. Thank you for the opportunity to submit these comments. We are available to discuss with you any questions you might have.

Sincerely,

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