

**APPENDIX TO MANUSCRIPT**

APPENDIX A

**15A NCAC 02B .0234 NEUSE RIVER BASIN - NUTRIENT SENSITIVE  
WATERS MANAGEMENT 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 the water quality in the Neuse River Estuary and protect its designated uses.
- (2) Applicability. This Rule applies to all wastewater treatment facilities in the Neuse River Basin that receive nitrogen-bearing wastewater and are required to obtain individual NPDES permits.
- (3) Definitions. For the purposes of this Rule, the following definitions apply:  
  
... (g) "Nonpoint source load allocation" is that portion of the Neuse River nitrogen TMDL assigned to all other nitrogen sources in the basin other than individually permitted wastewater facilities and represents the maximum allowable load of total nitrogen to the estuary from these nonpoint sources. . . .
- (4) This Item specifies the nitrogen wasteload allocation for point sources.
  - (a) Beginning with the calendar year 2003, the nitrogen wasteload allocation for point sources shall not exceed 1.64 million pounds per calendar year plus any portion of the nonpoint source load allocation purchased in accordance with the provisions in Items (7) and (8) of this Rule and 15A NCAC 02B .0240.
  - (b) The Commission shall order future revisions in the nitrogen wasteload allocation whenever necessary to ensure that water quality in the estuary meets all standards in 15A NCAC 02B .0200 or to conform with applicable state or federal requirements.
- (5) This Item specifies nitrogen discharge allocations for point sources.
  - (a) Upon adoption of this Rule and 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.
- (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 make every reasonable effort to obtain estuary allocation for the proposed wastewater discharge from existing dischargers. If estuary allocation cannot be obtained from the existing facilities, new facilities may purchase a portion of the nonpoint source load allocation for a period of 30 years at a rate of 200 percent of the cost as set in 15A NCAC 02B .0240 to implement practices designed to offset the loading created by the new facility. Payment

- for each 30-year portion of the nonpoint source load allocation shall be made prior to the ensuing permit issuance.
- (c) No application for a new discharge shall be made or accepted without written documentation demonstrating that the requirements of Sub-Items (a) and (b) of this Item have been met.
  - (d) The nitrogen discharge allocation for a new facility treating municipal or domestic wastewaters shall not exceed the mass equivalent to a concentration of 3.5 mg/L at the maximum monthly average flow limit in the facility's NPDES permit.
  - (e) The nitrogen discharge allocation for a new facility treating industrial wastewaters shall not exceed the mass equivalent of either the best available technology economically achievable or a discharge concentration of 3.2 mg/L at the maximum monthly average flow limit in the facility's NPDES permit, whichever is less.
  - (f) New dischargers must meet a monthly average total phosphorous limit of 1 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 an application for increased discharge shall make every reasonable effort to minimize increases in their nitrogen discharges, such as reducing sources of nitrogen to the facility or increasing the nitrogen treatment capacity of the facility; or to obtain estuary allocation from existing dischargers.
  - (c) No application for an expanding facility shall be made or accepted without written documentation demonstrating that the requirements of Sub-Items (a) and (b) of this Item have been met.
  - (d) If these measures do not produce adequate estuary allocation for the expanded flows, facilities may purchase a portion of the nonpoint source load allocation for a period of 30 years at a rate of 200 percent of the cost as set in 15A NCAC 02B .0240 to

implement practices designed to offset the loading created by the new facility. Payment for each 30-year portion of the nonpoint source load allocation shall be made prior to the ensuing permit issuance.

- (e) The nitrogen discharge allocation for an expanded facility treating municipal or domestic wastewaters shall not exceed the mass equivalent to a concentration of 3.5 mg/L at the maximum monthly average flow limit in the NPDES permit, or its existing allocation, whichever is greater.
  - (f) The nitrogen discharge allocation for expanding facilities of an industrial nature shall not exceed the mass equivalent to the best available technology economically achievable or a concentration of 3.2 mg/L at the maximum monthly average flow limit in the facility's modified NPDES permit, whichever is less. If the resulting mass is less than the facility's existing discharge allocation, the existing discharge allocation shall not be reduced.
  - (g) Expanding facilities must meet a monthly average total phosphorous limit of 1 mg/L unless they are a member in good standing of a group compliance association described in Item (9) of this Rule, in which case they must meet a quarterly average total phosphorus limit of 2 mg/L.
  - (h) 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.
- (9) This Item describes the option for dischargers to join a group compliance association to collectively meet nutrient load allocations.
- (a) Any or all facilities within the basin may form a group compliance association to meet nitrogen estuary allocations collectively. Any such association must apply for and shall be subject to an NPDES permit that establishes the effective total nitrogen allocations for the association and for its members. More than one group compliance association may be established. No facility may belong to more than one association at a time.
  - (b) No later than 180 days prior to expiration of the association NPDES permit, the association and its members shall submit an application for a NPDES permit for the discharge of total nitrogen to the surface waters of the Neuse River Basin. The NPDES permit shall be issued to the association and its members as co-permittees

- ("association NPDES permit"). It shall contain the association's estuary allocation and individual estuary allocations for each of the members.
- (c) An association's estuary allocation of total nitrogen shall be the sum of its members' individual estuary allocations plus any other estuary allocation obtained by the association or its members.
  - (d) An association may reapportion the individual estuary allocations of its members on an annual basis. The association NPDES permit shall be modified to reflect the revised individual estuary allocations.
  - (e) Beginning in calendar year 2003, if an association does not meet its estuary allocation, it shall make offset payments for nonpoint source controls no later than May 1 of the following year at the rate set in 15A NCAC 02B .0240.
  - (f) Association members shall be exempted from the permit limits for total nitrogen contained in their individually issued NPDES permits so long as they remain members in an association. Association members shall be exempted from their individual estuary allocations in the association NPDES permit as long as the association is in compliance with its estuary allocation. If the association fails to meet its estuary allocation, the association and the members that have failed to meet their individual estuary allocations in the association NPDES permit will be out of compliance with the association NPDES permit.
- (10) Regional Facilities. In the event that an existing 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.

APPENDIX B

TOTAL NITROGEN DISCHARGE MONITORING REPORT											PAGE 1 OF 4
NEUSE RIVER COMPLIANCE ASSOCIATION											
YEAR-END REPORT FOR 2005											
2005 - JAN THROUGH DEC											
NPDES PERMIT NO: NCC000001											
END OF PIPE											
FACILITY	NPDES Permit	Permit Flow <sup>1</sup> (MGD)	2005 Avg Flow (MGD)	Member TN Allocation (lbs/Yr.)	Member TN Discharge (Lbs/Yr.)	Transport Factor	Temporary Lease Agreement	ESTUARY			
								Original Estuary Allocation	Adjusted TN Allocation 2005 (lbs/Yr.)	2005 TN Discharge (Lbs/Yr.)	
Town of Apex	NC0064050	3.60	2.260	40,547	31,622	50%		20,274	20,274	15,811.0	
Town of Benson	NC0020389	3.00	0.978	33,790	14,325	50%		16,895	16,895	7,162.5	
DHHS Umstead Hosp. (Butner)	NC0026824	3.50	1.935	58,599	31,820	10%		5,860	5,860	3,182.0	
Cary North	NC0048879	12.00	6.451	143,246	66,603	50%		71,623	71,623	33,301.5	
Cary South	NC0065102	16.00	5.045	180,211	35,650	50%		90,105	90,105	17,825.0	
County of Johnston.	NC0030716	4.99	3.467	67,467	22,299	50%	-1800	33,734	31,934	11,149.5	
Town of Clayton	NC0025453	2.50	1.342	21,400	11,452	50%		10,700	10,700	5,726.0	
Contentnea MSD	NC0032077	2.85	1.981	32,100	34,602	70%	1800	22,470	24,270	24,221.4	
Town of Farmville	NC0029572	3.50	2.060	42,211	18,804	50%		21,106	21,106	9,402.0	
City of Goldsboro 01 & 02	NC0023949	16.80	6.092	198,118	61,776	70%		138,521	138,521	43,243.2	
			0.910								
Town of Kenly	NC0064891	0.63	0.364	7,096	10,617	50%	1800	3,548	5,348	5,308.5	
City of Kinston (Peachtree)	NC0020541	6.75	3.516	76,026	53,191	70%		53,218	53,218	37,233.7	
City of Kinston (North)	NC0024236	4.50	1.607	50,684	37,421	70%		35,479	35,479	26,194.7	
Town of LaGrange	NC0021644	0.75	0.427	8,447	4,639	70%		5,913	5,913	3,247.3	
Neuse Colony	NC0064564	0.75	0.072	8,447	5,564	50%		4,224	4,224	2,782.0	
City of New Bern	NC0025348	6.50	4.318	52,937	37,156	100%		52,937	52,937	37,156.0	
City of Raleigh	NC0029033	60.00	46.178	676,417	358,074	50%		338,209	338,209	179,037.0	
Wake Forest	NC0030759	6.00	0.710	67,579	5,463	50%		33,790	33,790	2,731.5	
City of Wilson	NC0023906	14.00	8.543	157,684	105,181	50%		78,842	78,842	52,590.5	
Town of Zebulon	NC0079316	1.85	0.580	22,455	9,751	50%		11,227	11,227	4,875.5	
Unifi-Kinston, LLC	NC0003760	3.60	0.756	35,193	16,460	70%	-1800	24,635	22,835	11,522.0	
MCAS Cherry Point	NC0003816	3.50	2.146	39,421	32,924	100%	20000	39,421	59,421	32,924.0	
Association Allocation <sup>3</sup>				48,879	0	50%	-20000	24,440	4,440	0.0	
<b>NRCA TOTALS</b>		<b>177.57</b>	<b>101.739</b>				<b>Net 0</b>	<b>1,137,171</b>	<b>1,137,171</b>	<b>566,627</b>	
THIS MONITORING REPORT HAS BEEN COMPILED FROM CO-PERMITTEE MEMBERS MONTHLY DISCHARGE MONITORING REPORTS. I CERTIFY THAT IT IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.											
HAYWOOD M. PHTHISIC, CHAIRMAN, NEUSE RIVER COMPLIANCE ASSOCIATION											
DATE											
1. Flow from Nutrient Management Strategy with subsequent changes.											
2. Goldsboro Pipe 02 is from Constructed Wetlands											
3. Formerly Burlington Industries											
Temporary lease agreements between Unifi-Kinston LLC and Contentnea MSD, Kenly and Johnston Co. and MCAS Cherry Point and NRCA are reflected in the estuary allocations above.											
TN discharge is calculated from DMR monthly flow and TN concentration. The product is rounded to whole number.											
THIS REPORT PREPARED BY CINDY FINAN, NRCA EXECUTIVE DIRECTOR											

## APPENDIX C

### Neuse River Compliance Association By-Laws

The Operating Policy and Procedures Committee of the Association developed and recommended operating policies and procedures in May of 2003. The NRCA adopted the following policies and procedures on June 17, 2003.

**“Assessment of Penalties Paid by Association for Noncompliance.**

The member(s) responsible for reporting violations or other violations not related to exceedence of the Association’s group nitrogen allocation shall pay or share payment of the entire penalty.

**Incentives for Members to reduce their TN discharge and disincentives for exceeding their individual estuary allocation.**

The assessment for an individual member exceeding its estuary allocation shall be one-fourth of the Wetlands Restoration Fund amount for a member’s first annual exceedence, one-half for the second annual exceedence, three-fourths for the third annual exceedence and 100% afterwards. This assessment shall apply for an exceedence of an individual allocation in the year(s) in which the Association is compliant with its allocation and also in years when it exceeds its allocation, however in years that the Association exceeds its allocation, any amount paid by the individual discharger as its share of the Association penalty shall be credited to the assessment.

The assessment will be accounted for separately and made available to the member that paid it to use for the wastewater treatment plant improvements; provided that a plan for such improvements is presented to and approved by the NRCA as being reasonably designed to address the TN exceedence. The assessment will be repaid to the member once the project is completed and the member achieves compliance.

There should be an annual progress check by the NRCA to ensure that the project remains on the approved schedule.



APPENDIX D: EXCERPTS FROM PRE-HEARING STATEMENT

STATE OF NORTH CAROLINA

IN THE OFFICE OF  
ADMINISTRATIVE HEARINGS  
05 EHR 0326

COUNTY OF WAKE

CITY OF RALEIGH, )  
Petitioner, )  
 )  
v. )  
 )  
N.C. Department of Environment and )  
Natural Resources, Division of Water )  
Quality )  
Respondent. )

PETITIONER’S  
PREHEARING  
STATEMENT

NOW COMES, the Petitioner City of Raleigh, by and through its attorney of record, the undersigned Associate City Attorney Daniel F. McLawhorn, and files this Prehearing Statement in response to the Order for Prehearing Statements. The City reserves the right to amend this statement as the matter progresses.

A. The issues to be resolved, and the statutes, rules and legal precedent involved:

Issues:

1. Was the reallocation of an additional 6,118 pounds of nitrogen loading capacity to Department of Health and Human Services/Town of Butner (hereinafter “DHHS”) by Division of Water Quality (hereinafter “DWQ”) a “major modification” of the Neuse River Compliance Association (hereinafter “NRCA”) permit, Permit No. NCC000001, as the term is applied in the National Pollution Discharge Elimination System (hereinafter “NPDES”) program?
2. Is the reallocation of nitrogen pounds not in use from the extreme eastern end of the Neuse River basin to the extreme western end of the basin (approximately 150 miles) and to a location which will impact the highest stressed area of the protected Neuse Estuary a “major permit modification”?
3. Did DWQ violate the controlling federal and state procedures when it reallocated the Bay River Metropolitan Sewerage District nitrogen estuary allocation to DHHS as minor permit modification without:
  - (a) first obtaining the consent of the City of Raleigh, as a co-permittee, for the modification or

- (b) providing the notice and opportunity- for- comment required, including the N.C. Gen. Stat. § 143-215.1(b)(4)c. notice to the City of Raleigh as a person affected by the modification?
4. Did DWQ violate 40 CFR §§ 124.5, 122.62 and 122.63 and 15A NCAC 2H .0114 by reallocating the 6,119 estuary pounds of nitrogen to DHHS without public notice and the other procedures attendant to a major modification?
5. Did DWQ exceed its authority when it approved an “estuary allocation” for DHHS which was greater than the amount resulting from multiplying the end-of-pipe discharge allocation in the individual NPDES permit times the assigned transport factor since any other amount is not the “estuary allocation” as defined at 15A NCAC 2B .0234(3) (d) and 2B .0234(5) (a) (v)?
6. Did the DWQ violate 15A NCAC 2B .0234(5)(a)(ii) when it approved the additional allocation to DHHS which will cause the total annual discharge allocation upstream of Falls Lake Dam to exceed 443,700 pounds of total nitrogen from dischargers with permitted flows greater than or equal to 0.5 million gallons per day?
7. Is the addition of the poundage to the DHHS estuary allocation in the NRCA permit an unlawful modification of the discharge limit in the DHHS individual NPDES permit due to the provisions in 15A NCAC 2B .0234(3)(d) and 2B .0234(5)(a)(v)?
8. Did the DWQ Director violate 15A NCAC 2B .0234(6) (c) when he failed to adopt more stringent localized limits for nitrogen for the reallocation to DHHS in issuing the modified permit to the NRCA?
9. Did DWQ violate N.C. Gen. Stat. 143-215.1(c3) when it approved the DHHS/Bay River Metropolitan Sewerage District transfer of nitrogen loading capacity from Bay River Metropolitan Sewerage District, a facility that was not discharging into the water body, when the transfer occurred?
10. Has the Environmental Management Commission approved a calibrated nitrogen nutrient response model pursuant to N.C. Gen. Stat. § 143-215.1(c5) for the Neuse Estuary?
11. Does the calibrated nitrogen nutrient response model for the Neuse Estuary require that DHHS’ individual discharge be limited at a different concentration than 5.5 mg/l average annual mass load of total nitrogen?
12. Did the DWQ violate 15A NCAC 2B .0234(9) (d) when it modified the permit to make a reallocation to DHHS without a request approved by the Board of the NRCA?

Statutes, rules and legal precedent involved:

1. N.C. Gen. Stat. § 143-215.1;
2. N.C. Gen. Stat. § 150B-23 thru -37;
3. 15A NCAC 2B .0234;
4. 15A NCAC 2B .0240;
5. 15A NCAC 2H .0114;
6. N.C. Gen. Stat. § 143-212,
6. 40 CFR §§ 124.5, 122.62 and 122.63,
7. The City reserves the right to supplement as to legal precedent and other authorities as the matter progresses.

B. Brief Statement of Facts and Reasons Supporting Petitioner's Position on Each Issue in Dispute.

This matter arises from the December 30, 2004 modification of the NPDES permit issued to the Neuse River Compliance Association by the Division of Water Quality. The City contends that permit is authorized, and controlled, by N.C. Gen. Stat. § 143-215.1(c3), other pertinent parts of the NPDES permitting statutes, and the rules adopted by the Environmental Management Commission (hereinafter "EMC") in particular 15A NCAC 2B .0234 and .0240. Three modifications were made to the permit. The modifications not in dispute added two new members to the NRCA. The third modification increased the Estuary Allocation to DHHS by 6,113 pounds – more than doubling its ability to add nitrogen to the Neuse River Estuary without any sanction. That modification caused the Contested Case to be brought by the City of Raleigh.

The City finds its Contested Case Petition on three general categories of violations by the Respondent. First, the City contends that the request for a modification was wrongly determined by DWQ to be a minor modification resulting, *inter alia*, in a failure to provide required notice and comment opportunities. Secondly, the DWQ violated its rules when (1) it approved an Estuary Allocation which is larger than the product of multiplying the end-of-pipe Discharge Allocation of DHHS times the transport factor for DHHS and (2) which allowed the total volume of nitrogen discharged annually into Falls Lake, by NPDES permitted dischargers with a flow greater than 0.5 million gallons per day, to exceed 443,700 pounds. Thirdly, the DWQ violated the EMC's rules when it approved the revised DHHS Estuary Allocation without considering the localized impacts of the increased nitrogen loading of Falls Lake, a drinking water source serving over 340,000 people, or the upper end of the Neuse Estuary. The City also contends that

the request for reallocation was an *ultra vires* act by the Executive Director of the NRCA. As such, DWQ did not have a valid request for action and it should have been denied under the EMC's rules governing such requests.

“Minor modifications”, as defined by state rules and federal regulations, do not include the modifications approved by DWQ. The specific definitions of “minor modification” are narrow and strictly applied as a minor modification is exempted from most notice and comment procedures. No notice of the intended modification was provided, including notice to the City of Raleigh which was objecting strongly to any increase in the nitrogen loading of Falls Lake by DHHS, when the permit was modified. Moreover, this reallocation is not eligible for the classification of a minor modification even if the applicable standards can be read to allow similar situations to be deemed minor modifications—a legal conclusion the City disputes. This reallocation is not eligible for such consideration as it is not sufficiently similar to the stated categories for minor modifications. This modification actually will authorize a new nitrogen discharge affecting the Neuse Estuary. The Bay River MSD had not discharged into the Neuse River since the plan to recover the Neuse Estuary from nitrogen overloading was adopted. In addition, the authorized discharge location was at the extreme eastern end of the Neuse Estuary, i.e. near Oriental. The new owner of the allocation will use it at the extreme western end of the Neuse River, at the head of Falls Lake. The new owner intends to make use of the allocation which had not affected the Neuse Estuary for over 5 years. Finally, DWQ allowed the transport factor to be used to enlarge the amount of nitrogen tenfold, from 6,113 pounds to 61,130 pounds, to be discharged into Upper Falls Lake which has significant potential for increasing the eutrophic conditions in that part of the Lake resulting in more frequent violations of the water quality standard for chlorophyll-a.

The Environmental Management Commission rules that control the request for reallocation plainly define “Estuary Allocation” to be the product of the end-of-pipe discharge in the individual NPDES permit times the transport factor, which is 0.10 or 1/10<sup>th</sup> for DHHS. The end-of-pipe nitrogen limit in the DHHS NPDES permit is 58,599 pounds (which supports Estuary Allocation of 5,600 pounds). The end-of-pipe amount is not increased in the reallocation but the amount of Estuary Allocation was revised to total of 11,973 pounds. That amount is inconsistent with the definition of Estuary Allocation and thus was not eligible for approval by DWQ until DHHS, at a minimum, received an amended NPDES permit to support the higher allocation. In addition, the EMC rules expressly limit the total amount of nitrogen able to be discharged into Falls Lake from individual dischargers with a permitted flow greater than 0.5 million gallons per day to 443,700 pounds. Before the reallocation, the total nitrogen discharge of permitted flows into Falls Lake exceeded that amount thus making this request ineligible for consideration. DWQ failed, to and unlawfully has refused, to apply the rule to the reallocation request.

The EMC rules for existing dischargers affecting the Neuse Estuary include: “The director shall establish more stringent limits for nitrogen or phosphorous upon

November 17, 2006

finding that such limits are necessary to protect water quality in localized areas.” DWQ failed to establish more stringent conditions despite its own experts informing the permit writer and the Deputy Director of DWQ that the Upper Falls Lake, into which DHHS discharges via Knapp of Reeds Creek, was exceeding the chlorophyll-a standard. In addition, the Phase II Neuse Estuary TMDL for the Neuse Estuary published in 2001 concluded that the upper, or most western portion of the Neuse Estuary has the greatest continuing problems and that new control measures will be needed to restore the uses impaired by excess nutrients. DWQ failed to establish more stringent conditions despite its own findings that a reduction in nitrogen contributions to the upper part of the Neuse Estuary is required to restore the water quality of the Neuse Estuary.

Finally, the City contends that DWQ had a responsibility to determine whether the requested reallocation has been submitted by an authorized person on behalf of the NRCA. Under the By-Laws of the NRCA, a reallocation proposal must be approved by the full Board of the NRCA. This request was made by the Executive Director without any supporting approval by the Board of the NRCA. Thus, the request should have been denied as unauthorized and part of an *ultra vires* act.

APPENDIX E

City of Raleigh Public Utilities - Neuse River WWTP  
Impacts of TMDL Rule Change

Parameter	Current Concentration Limits	Translated TMDL	
		lbs @ 60 MGD	lbs. @ 75 MGD
<b>BOD (summer)</b>			
Daily	(7.5 mg/l)	3,753	4,691.25
Weekly	7.5 mg/l	26,271	32,838.75
Monthly (30 days)	5.0 mg/l	75,060	93,825.00
<b>BOD (winter)</b>			
Daily	(15 mg/l)	7506	9,382.50
Weekly	15 mg/l	52,542	65,677.50
Monthly (30 days)	10 mg/l	150,120	187,650.00
<b>TSS</b>			
Daily	(45 mg/l)	22,518	28,147.50
Weekly	45 mg/l	157,626	197,032.50
Monthly (30 days)	30 mg/l	450,360	562,950.00
<b>NH3-N (summer)</b>			
Daily	(3.0 mg/l)	1,501.2	1,876.5
Monthly (30 days)	2.0 mg/l	30,024	37,530
<b>NH3-N (winter)</b>			
Daily	(6.0 mg/l)	3,002.4	3,753
Monthly (30 days)	4.0 mg/l	60,048	75,060
<b>Fecal Coliform</b> Not Applicable			
<b>Total Nitrogen</b>			
Daily	(1,853.2 lbs.)	(1,853.2 lbs.)	(1,853.2 lbs.)
Annually	676,417 lbs.		
<b>Total Phosphorous</b>			
Daily	(3.0 mg/l)	1,501.2	1,876.5
Quarterly	2.0 mg/l @ 60 MGD 1.0 mg/l @ 75 MGD		

	(Two Year Window of Max Day/Month)				
	Effluent BOD, lbs.	Effluent TSS, lbs.	Effluent NH3N, lbs.	Effluent Total Nitrogen, lbs.	Effluent Total Phosphorous, lbs.
Jul '04	2,231.08	1,355	338.73	1,784	927
Aug '04	0.00	2,463	114.10	2,153	1,239
Sep '04	0.00	794	183.79	1,633	377
Oct '04	0.00	398	109.30	2,072	627
Nov '04	0.00	967	238.99	1,283	795
Dec '04	0.00	1,065	76.57	1,375	633
Jan '05	0.00	1,393	153.08	2,035	512
Feb '05	914.25	734	241.45	2,288	736
Mar '05	950.54	1,944	154.87	2,498	464
Apr '05	1,063.05	1,241	228.84	1,326	653
May '05	1,319.10	470	0.00	1,616	669
Jun '05	809.67	764	281.12	1,870	654
Jul '05	1,481.06	2,975	197.74	912	526
Aug '05	850.20	797	414.02	1,217	945
Sep '05	804.72	777	99.34	1,554	844
Oct '05	1,136.98	799	226.86	1,895	1,501
Nov '05	2,047.64	903	264.60	2,389	459
Dec '05	880.39	942	101.22	2,272	280
Jan '06	0.00	842	97.52	3,185	414
Feb '06	1,736.47	1,088	135.09	1,650	878
Mar '06	1,324.20	940	74.20	1,346	1,142
Apr '06	1,182.41	1,468	423.86	1,184	703
May '06	824.83	369	166.26	966	744
Jun '06	2,770.71	8,757	784.05	3,781	859

**Conclusions:**

1. TN - Numerous days over current TMDL/365.
2. TP - One day at anticipated limit.
3. All other parameters well below assumed loading limits.

(x.xx) = Assumed limit