



Metropolitan North Georgia Water Planning District

40 Courtland Street NE | Atlanta, Georgia 30303

TO: Executive Committee

FROM: Metro Water District Staff

DATE: September 29, 2015

RE: Cherokee County Wastewater Plan Appendix B Amendment - Process Documentation and Staff Recommendation

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The Metropolitan North Georgia Water Planning District received a request from the Cherokee County Water and Sewerage Authority to modify the Wastewater Management Plan. According to the Plan Amendment Guidelines adopted by the Board on August 28, 2013, District staff is required to provide the Executive Committee a category recommendation concerning the plan amendment request prior to the meeting. The staff recommends the following change outlined below:

**Amendment Request:** Wastewater Management Plan

**Local Jurisdiction:** Cherokee County

**Description:** Modification consists of the combining of capacities for the Northwest WPCP and the Northeast WPCP between 2010 and 2035 planning horizon within Appendix B. Each facility will discharge into the Etowah Basin. This will allow expansion between the two plants to occur where appropriate as local growth and planning needs dictate. Note #2 related to shared capacity with the City of Canton for the Northwest WPCP will be deleted to reflect changed conditions that render the former cooperative capacity development agreement nonfunctional.

**Staff Recommendation:** District staff recommends this request be categorized as a major amendment because modification of the plan is local in nature but may be objected to by other local parties.

## Cherokee County

### Summary of Needs

	2010 Maximum Month Average Daily Flow (MMF-MGD)	2015 Maximum Month Average Daily Flow (MMF-MGD)	2025 Maximum Month Average Daily Flow (MMF-MGD)	2035 Maximum Month Average Daily Flow (MMF-MGD)
Wastewater Flows & Capacities				
Cherokee County Needs	17	20	28	40
<b>Total Projected Flow to Plants</b>	<b>17</b>	<b>20</b>	<b>28</b>	<b>40</b>
Treatment Capacity	20.5	28.25	47.85	52.85

### Capital Projects

- New treatment capacity will be provided by expanding the Canton WPCP, Cherokee County Water and Sewer Authority's (CCWSA) Fitzgerald Creek and Cherokee Rose Creek WWTPs and through CCWSA construction of two new wastewater treatment facilities: Northeast Cherokee WPCP and the Northwest WPCP. The City of Woodstock WPCP will continue to treat sewage from the City of Woodstock.
- Regionalization with adjoining jurisdictions can only be achieved by combining assimilative capacity from a requesting jurisdiction contingent upon mutually agreeable negotiations between the parties.

### Basin Considerations

Treated flow will be discharged to surface water bodies in the Etowah River Basin. More stringent phosphorus limits will likely be imposed as a result of the recent TMDL for Lake Allatoona.

### Phasing Plan

Facilities (Note 1)	By 2010			2011 to 2015			2016 to 2025			2026 to 2035		
	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)
	Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)	
Woodstock WPCP	No expansions		2.5	No expansions		2.5	No expansions		2.5	No expansions		2.5
CCWSA Fitzgerald Creek WPCP	Expand	4.0	6.0	Expand	5.75	11.75	No expansions		11.75	No expansions		11.75
CCWSA Rose Creek WPCP	No expansions		6.0	No expansions		6.0	Expand	4.0	10.0	Expand	5.0	15.0
Canton WPCP	Expand	4.1	6.0	Expand	2.0	8.0	No expansions		8.0	No expansions		8.0
CCWSA Northeast WPCP and/or Northwest WPCP	New	4.0	4.0	Expand	4.0	4.0	New	15.6	15.6	No expansions		15.6
<b>Total Capacity (MMF-MGD)</b>			<b>20.5</b>			<b>28.25</b>			<b>47.85</b>			<b>52.85</b>

#### Notes:

1) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.

2) Cherokee Northwest WPCP capacity is shared between CCWSA (60%) and the City of Canton (40%).

### Non-Capital Programs

The following non-capital programs are specific to Cherokee County. These programs are in addition to those that apply to all counties within the Metro Water District.

- Participate in joint planning study with Forsyth County and affected cities to develop a regional approach to wastewater management for the Upper Etowah Basin.

# Cherokee County Water & Sewerage Authority

September 17, 2015

Ms. Katherine Zitsch  
Metropolitan North Georgia Water Planning District  
40 Courtland Street, NE  
Atlanta, Georgia 30303

RE: Amendment to the District Wastewater Plan Appendix B for  
Cherokee County Water & Sewerage Authority

Dear Ms. Zitsch,

The Cherokee County Water & Sewerage Authority has been working on a new NPDES permit for the Northeast WPCP (aka Riverbend WPCP) since 2013. After extensive discussions with Georgia Environmental Protection Division staff regarding a draft permit, we find it prudent to ask that Appendix B for Cherokee County in the existing plan be amended to show the proposed Northeast plant and proposed Northwest plant as a combined capacity of 15.6 MGD. Our intent in combining the two proposed facilities in one line in Appendix B is to allow for maximum flexibility to place treatment capacity in the area and facility to meet demand pressures.

Both proposed facilities will discharge reclaimed water to the Etowah River. It is our intent to immediately capture the entire capacity of 15.6 MGD in a single permit for the Northeast (Riverbend) WPCP at this time. The permit will be phased in the manner shown in the attached letter of May 3, 2013 from EPD. The first phase of construction of the Northeast (Riverbend) WPCP is planned for construction in 2016-2017.

When there is sufficient demand in the northwest quadrant of Cherokee County to justify the first phase of the proposed Northwest WPCP, Cherokee County Water & Sewerage Authority intends to petition EPD to transfer a portion of the capacity from the Northeast (Riverbend) NPDES permit to a new NPDES permit for the Northwest WPCP. Together the currently planned ultimate capacity of the two plants will not exceed the 15.6 MGD.

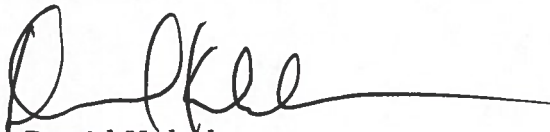
P.O. Box 5000 ~ Canton, Georgia 30114 ~ 770-479-1813

# Cherokee County Water & Sewerage Authority

Cherokee County Water & Sewerage Authority also asks that note #2 in Appendix B be removed to add clarity to the plan. This note is an anachronism that refers to a tripartite agreement (Canton, CCWSA and Pilgrims Pride) that existed at the time the 2009 plans were written. Under this agreement, Canton was to provide industrial wastewater treatment for a Pilgrims Pride rendering facility for a number of years free of charge, Pilgrims Pride would relinquish its industrial NPDES permit for that rendering facility to EPD and EPD would issue a new municipal NPDES permit (using the loadings associated with the Pilgrims Pride Industrial NPDES permit) to CCWSA, and CCWSA would build a new Northwest WPCP in which Canton would receive capacity in exchange for the industrial wastewater treatment it was to supply to Pilgrims Pride. Before the stipulations of the tripartite agreement could be executed, Pilgrims Pride sold its rendering facility to American Proteins, and American Proteins subsequently suspended its rendering operations at this location and sold its physical facilities and land to CCWSA. This made the agreement no longer valid, and, thus, note #2 in Appendix B no longer appropriate. Canton (and other similarly situated government entities with water and wastewater utilities that are independent of CCWSA), however, has the option to access wastewater capacity through the existing Cherokee County Water & Sewerage Authority Capacity Policy.

Thank you for your attention to this very important and time sensitive matter. Please contact us if you have any questions.

Sincerely,



David Kubala  
Environmental Affairs Manager

Cc: Tom Heard

# Cherokee County Water & Sewerage Authority

## Georgia Department of Natural Resources

Environmental Protection Division, Watershed Protection Branch  
 4220 International Parkway, Suite 101, Atlanta, Georgia 30354  
 Wastewater Regulatory Program  
 Phone: 404.362.2680; Fax: 404.362.2691

May 3, 2013

Mr. David Kubala, Environmental Affairs Manager  
 Cherokee County Water & Sewer Authority  
 PO Box 5000  
 Canton, GA 30114

RE: Cherokee County – Northeast WWTP  
 WLA Request for 0.5, 1.0, 2.0, 4.0, 8.0, and 15.6 MGD  
 Etowah River  
 EPD # 2013-032

Dear Mr. Kubala:

We have completed the evaluation of effluent limitations for a new discharge in the Etowah River. This Wasteload Allocation (WLA) is valid for one year from the date of this letter unless an extension is requested and granted in writing. If the project does not progress within this timeframe, EPD reserves the right to reevaluate the WLA.

### Recommended permit limits for a discharge into the Etowah River:

Pollutants/Parameters <sup>(1)</sup>	Limits					
	0.5	1.0	2.0	4.0	8.0	15.6
Flow, MGD	0.5	1.0	2.0	4.0	8.0	15.6
5-day Biochemical Oxygen Demand, mg/L	5.0	5.0	5.0	5.0	5.0	5.0
Total Suspended Solids, mg/L	5	5	5	5	5	5
Ammonia (as N), mg/L	2.0	2.0	2.0	2.0	2.0	2.0
Dissolved Oxygen (minimum), mg/L	6.0	6.0	6.0	6.0	6.0	6.0
Fecal Coliform Bacteria, #/100 mL <sup>(2)</sup>	23	23	23	23	23	23
Total Phosphorus (as P), mg/L	0.16	0.16	0.16	0.16	0.16	0.13
Ortho-Phosphate (as P), mg/L	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Total Kjeldahl Nitrogen (as N), mg/L	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Nitrate-Nitrite (as N), mg/L	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
pH (minimum – maximum), standard units	6.0 – 9.0	6.0 – 9.0	6.0 – 9.0	6.0 – 9.0	6.0 – 9.0	6.0 – 9.0

<sup>(1)</sup> Values are maximum monthly averages, except as noted

<sup>(2)</sup> Monthly geometric mean

The maximum Total Phosphorus (TP) load allocated to the Authority is 6,165 lbs/year. Although the load is currently assigned to the Northeast WWTP, EPD may reallocate a portion of the flow and TP load in the future to other wastewater treatment plant(s) owned by the Authority and located in the Etowah Basin. In addition, some of the capacity allocated to the Authority will be shared between the Authority and City of Canton in accordance with the Metropolitan North Georgia Water Planning District's Wastewater Management Plan.

# Cherokee County Water & Sewerage Authority

Mr. Kubala  
May 3, 2013  
Page 2

Priority pollutant permit limits and aquatic toxicity testing requirements will be determined by the Wastewater Regulatory Program at the time the permit is written.

For a facility with a capacity of 1.0 MGD or greater, it is recommended that a 120-day long-term BOD test be performed once during the permit period prior to renewal. The test should be performed on an effluent sample collected during the critical period from June to September. The results should be provided to EPD prior to the renewal of the permit.

Since the proposed discharge is located upstream from water intakes, EPD requires installation of ultraviolet (UV) or ozone disinfection as a barrier to inactivate *Cryptosporidium* and other pathogens that may be present in the waste stream.

The US EPA's Unregulated Contaminant Monitoring Rule 3 (UCMR 3) will become effective in 2013 and applies to public water systems serving more than 10,000 people. The UCMR 3 requires monitoring of 30 contaminants, which will include 28 new chemicals and two viruses. EPD recommends that the applicant investigate and consider the installation of Granular Activated Carbon (GAC) filtration to provide adsorption of various contaminants at the proposed wastewater treatment plant, including hormones, VOCs, SOCs, metals, perfluorinated compounds, PPCPs, CECs, and other known and unknown contaminants. If not recommended in the engineering report, the proposed design shall include the flexibility to install GAC filtration in the future if needed to comply with a water quality or safe drinking water standard or goal.

Communities requesting a new or increased surface water discharge permit are required to prepare a Watershed Assessment (WA) and Watershed Protection Plan (WPP) for the watersheds in their jurisdiction if they have not already done so.

The County will also be required to perform an Antidegradation analysis justifying the proposed discharge. Please reference our guidance document, *Planning for Domestic Wastewater Systems*, available on the EPD website.

If the proposed discharge is not in accordance with the Metropolitan North Georgia Water Planning District's Wastewater Management Plan (District Plan), we recommend that you seek an amendment to the plan. EPD cannot issue wastewater permits that are inconsistent with the plan.

If you have questions concerning this correspondence, please do not hesitate to contact Benoit Causse of my staff at 404-675-1620 or [benoit.causse@dnr.state.ga.us](mailto:benoit.causse@dnr.state.ga.us).

Sincerely,



Gigi Steele, Manager  
Municipal Permitting Unit

GMS\bsc

cc: Ms. Becky Champion, Watershed Manager  
Mr. Andy Kao, Manager, Water Quality Modeling Unit  
Mr. David Hatabian, P.E., City of Canton, GA