GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Watershed Protection Branch
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JUN 07 2017

Mr. Jason Ulseth, Riverkeeper
Chattahoochee Riverkeeper
3 Puritan Mill
916 Joseph E. Lowery Blvd.
Atlanta, GA 30318

RE: City of Atlanta
R.M Clayton, South River, & Utoy Creek
Water Reclamation Centers
NPDES Permit No. GA0039012
(Fulton County)

Dear Mr. Ulseth:

Thank you for your letter regarding the permit for the City of Atlanta. After consideration of your comments, EPD has determined that the permit as drafted is protective of water quality standards and we have issued the permit.

We have included an attachment, which addresses your concerns submitted during the public comment period. We appreciate your interest in this matter.

If you have any questions, please contact Benoit Causse of my staff at 404-463-4958 or *benoit.causse@dnr.ga.gov*.

Sincerely,

Jeffrey Larson, Assistant Branch Chief
Watershed Protection Branch

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Attachment: Response to comments

ATTACHMENT – Response to Comments
R.M Clayton, South River, & Utoy Creek
Water Reclamation Centers
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Comment # 1: We are concerned about the impact on water quality following elimination of the 750 cubic feet per second (cfs) minimum flow provision. On August 26, 2015, the Georgia Department of Natural Resources voted to remove a provision from state water quality rules and regulations which for the past 40 years called for a minimum flow of 750 cfs to be maintained in the Chattahoochee River as measured at its juncture with Peachtree Creek. What effort has been made to determine what effect the lowered seasonal flow will have on water quality in the Chattahoochee River?

EPD Response:

The U.S. Army Corps of Engineers (USACE) has recently approved the updated Water Control Manual for the Apalachicola-Chattahoochee-Flint River Basin. The document has the following specification for a minimum flow at Peachtree Creek: A continuous net minimum flow of 650 cfs from November through April (cold months) and a continuous net minimum flow of 750 cfs in the remaining months (warm months). Modeling and reasonable potential analysis were conducted for both flows and periods to verify that the proposed limits were protective year-round. The total instream wastewater concentration (IWC) only increases from approximately 17% to 19% when reducing the stream flow from 750 to 650 cfs.

Comment # 2: What is the rationale for combining three facilities under one permit? Is this a common practice for municipal discharges in the state of Georgia or is it only done for the city of Atlanta?

EPD response:

Although most municipal NPDES permits issued by EPD cover one facility with one discharge location, permit format can vary. For instance, in the Chattahoochee River Basin, Forsyth County has a NPDES permit covering two facilities (GA0038954 - Shakerag & Fowler WRFs), Cobb County has two individual NPDES permits (GA0026140 - R.L Sutton WRF and GA0026158 - South WPCP) with a combined loading for total phosphorus. The Atlanta combined permit allows for operational flexibility while being protective of the river.

Comment # 3: What is the effect of allowing the three facilities to combine their discharges to meet cumulative effluent limits? (a) If there is a violation of a concentration-based permit limit at a single facility, but the combined loading from the three facilities do not violate the combined monthly average, will EPD address the facility-specific violation? Will a violation of the combined loading limit be considered as three separate permit violations? (b) The Metropolitan North Water Planning District has established a TP concentration of 0.3 mg/L. The draft permit provides for a concentration of 0.5 mg/L at each facility. A non-Atlanta facility discharging TP between 0.3-0.5 mg/L would be in violation of its permit, whereas the Atlanta facilities would not.

EPD Response:

(a) Any exceedance of a numerical limit in the permit (flow, concentration, mass loading) is considered a violation. A violation of the loading limit would be considered a single violation.

(b) The total phosphorus limit established for the Metropolitan North Water Planning District (0.3 mg/L) is included in the loading limitation (214 Kg/day). The concentration-based limit of 0.5 mg/L is to allow some flexibility in the plant operation.

Please note that although the combined loading limits or higher concentration-based limits may give the City more flexibility, the permitted loadings were significantly reduced with the issuance of the combined permit as shown in Table 1 below.

Table 1: Permitted loading in Kg/day (minimum-maximum depending on calendar months)

Parameter	GA0024040 GA0021458 GA0021482 (Total)	GA0039012	**Loading reduction (%)**
Total Suspended Solids (TSS)	19,561	3,790	**81**
Carbonaceous Biochemical Oxygen Demand (cBOD)	10,566-16,627	2,770-3,130	**74-81**
Ammonia	1,961-11,085	350-710	**82-93**
Total Phosphorus (TP)	No loading limit (1003**)	214	**79**

** Calculated loading based on a concentration limit of 0.64 mg/L and a combined flow of 188 MGD.

Comment # 4: Does the Permit protect the Chattahoochee River immediately downstream of each outfall? The draft permit appears to reach its effluent limits by determining what will allow for full assimilation before discharges reach West Point Lake. Instead the draft permit should ensure that all three discharges are treated to ensure adequate protection of the Chattahoochee River immediately downstream of all three outfalls. The combined effluent limits for nutrients may adequately protect West Point Lake, but CRK is not convinced that there is sufficient consideration of impacts from the individual discharges in the River itself at the outfall.

EPD response:

The model allows for EPD to input discharges at their given locations and allows to run a simulation with all three discharges operating simultaneously. The model showed that each facility did not impact the river immediately downstream of their discharge. In addition, a lake model was used to evaluate the effects of the nutrients to West Point Lake.

Comment # 5: What instream sampling has EPD conducted to determine the impact of the wastewater discharges on water quality in the river?

EPD response:

Extensive sampling was conducted in 1991 and 1995 to calibrate the model. EPD uses data from USGS gauges for model verification.

Comment # 6: (a) The City's permit application indicates that all three facilities utilize diffusers. CRK patrols regularly on this stretch of river and we have observed that only the R.M Clayton has a diffuser. (b) The draft permit is premised on a determination that the three discharges mix completely with the receiving stream. On what basis did EPD made this determination? Are there data or mixing zone analyses supporting EPD's determination that complete and rapid mix occurs?

EPD response:

(a) The South River and Utoy Creek facilities are not equipped with a diffuser. This was a typographical error in the permit applications.

(b) EPD does assume complete mix when conducting reasonable potential analysis for metals and ammonia. There were no mixing zone analyses conducted for the City of Atlanta discharges.

Comment # 7: Did EPD consider ammonia toxicity in the development of ammonia effluent limits for the R.M. Clayton, South River and Utoy Creek facilities?

EPD response:

The Ammonia limits in the permit meet the EPA's 2013 Aquatic Life Ambient Water Quality Criteria for Ammonia in Freshwater.

Comment # 8: (a) The results from the City's 2014 WET testing raise concerns. Based on the results of the 2014 WET results (NOEC= 50%) and presence of influent from more than 60 industrial users, EPD should increase the frequency of WET testing for the R.M. Clayton discharge to twice per year instead of once per year. (b) The WET report provided in the permit application shows that testing on May 13, 2014 included a 24-hour composite sample of ammonia with a concentration of 5.51 mg/L. The City's Discharge Monitoring Report (DMR) on that day shows that the facility reported ammonia concentration was 0.03 mg/L for that day.

EPD response:

(a) Although the No Observed Effect Concentration (NOEC) decreased from 100% to 50% between the 2013 and 2014 WET tests, the effluent is still not considered toxic (NOEC is greater than the instream wastewater concentration of 19%). The City submitted two additional annual tests in 2015 and 2016. For both tests, the No Effect Concentration (NOEC) was 100%. At this time, there is no reason to increase the monitoring frequency.

(b) Three composite samples were collected for the 2014 WET test between May 12 & May 15. The laboratory made a typographical error when reporting the ammonia concentrations. The actual ammonia concentration is 1.51 mg/L. We verified the Operating Monitoring Report (OMR) submitted by the City. The ammonia data is compiled in Table 2 below for your information.

Table 2: Ammonia concentrations

Period	WET Test (mg/L)	Operating Monitoring Report (mg/L)
May 12-15	< 0.050	0.08
	1.51	1.46
	0.086	1.06