



ATLANTA
AUGUSTA
ST. SIMONS ISLAND

June 1, 2021

Mr. Jay Link
Wastewater Superintendent
City of Social Circle
P.O. Box 310
Social Circle, Georgia 30025

Re: City of Social Circle, Georgia
2021 POTW Local Limits
Project No. 212404

Dear Mr. Link:

We are enclosing recommended Industrial User (IU) local limits for the 15 pollutants often found in Publicly Owned Treatment Works (POTW) sludge and effluent that are considered Pollutants of Concern (POC) by EPA.

The POC limits were determined using the Maximum Allowable Industrial Loading (MAIL), which is calculated by applying a safety factor to the Maximum Allowable Headworks Loading (MAHL) and discounting for uncontrolled sources, hauled waste, and growth allowance. The limits were then determined using EPA's Local Limits Development Guidance manual, a headworks loading analysis of the City's Little River Water Pollution Control Plant (WPCP), and the Code of Federal Regulations. The POC limits are under 25% of the MAIL to prevent pass through or interference, protect human health and safety, and allow growth for future or current IU's.

Details of our evaluation and recommendations are as follow:

1. In our evaluation, we reviewed permits for existing IU's, effluent data provided by the City for these users, specifications for the Little River WPCP, EPA guidance, and the Code of Federal Regulations.
2. Recommended local limits appear appropriate for existing permittees not otherwise regulated by categorical standards and may be applied to all IU's. These limits do not appear to increase burdens on existing permittees.

3. Although the attached local limits are intended to be suitable for most general (not categorized) industrial users, they may be applied to categorical industries if more stringent. Furthermore, the City may wish to impose more stringent local limits for individual permits as needed to prevent interference or pass-through in the treatment works.

If you have questions or need additional information, please contact us.

Yours truly,

A handwritten signature in blue ink, appearing to read "Kenneth E. Green", with a long horizontal flourish extending to the right.

Kenneth E. Green, P.E.
Turnipseed Engineers

KEG:aa
Enclosures

**SOCIAL CIRCLE -LITTLE RIVER WPCP
INDUSTRIAL PRETREATMENT PROGRAM
PROPOSED LOCAL LIMITS**

May 17, 2021

Parameter	Maximum for any 1 day	Monthly Average shall not Exceed	Measurement Frequency
	mg/L		
pH ^{[1][2]} (std. units)	6.0 (minimum) - 8.5 (maximum) ¹		Daily
BOD ₅	900	750	1/Month
Total Suspended Solids	250	200	1/Month
Ammonia, as N	100	50	1/Month
Total Phosphorus, as P	Report	Report	1 /Month
Arsenic	0.025	0.025	1/Month
*Cadmium	0.008	0.008	1/Month
Chromium	0.05	0.05	1/Month
*Copper	0.109	0.02	1/Month
*Cyanide	0.082	0.03	1/Quarter
*Lead	0.116	0.015	1/Month
*Mercury	0.002	0.002	1/Month
Molybdenum	0.003	0.003	1/Month
Nickel	0.05	0.05	1 /Month
Selenium	0.05	0.05	1/Month
Silver	0.2	0.2	1/Month
*Zinc	0.212	0.212	1/Month
Priority Pollutants ²	N/A	N/A	2/Year ²

1 - Daily pH measurements are instantaneous readings and are not averaged monthly.

2 - Except for parameters otherwise specified above, the 126 Priority Pollutants listed in Title 40 Part 423, Appendix A of the Code of Federal Regulations, shall be sampled and analyzed semi-annually.

*Local Limit calculated was less than the limit set by Table 3 of the EPA Supplemental Manual and the corresponding value was used.

Prepared by:
Turnipseed Engineers
Augusta, Georgia
706-863-8800

City of Social Circle

Little River Local Limit Calculations

June 1, 2021

1.)

Max Allowable IU Load Total (lb/day)	
Pollutant	Max (lb/day)
BOD	2635.29
TSS	745.61
Ammonia	492.55
Copper	0.10

** From Little River Local Limits Calculations (Difference of uncontrollable loads and max headworks loading)

Current Permit (mg/L)

2.)	IU	Pollutant	Avg Effluent/IU	Units	Maximum Load (lbs/day)	Max. Conc (mg/L)
Avg Flow (GPD)	<i>IsoNova</i> 62,970	BOD	2.63	lb/day	4457	2000
		TSS	5.78	lb/day	1058	475
		Ammonia	0.16	lb/day	226	100
		pH	8.10		6.0 (minimum) - 9.0 (maximum)	
		Phosphorus	3.57	lb/day	Report	Report
Avg Flow (GPD)	<i>Standridge Color</i> 11,907	BOD	11.92	lb/day	4457	2000
		TSS	4.87	lb/day	1058	475
		Ammonia	0.18	lb/day	226	100
		pH	7.60		6.0 (minimum) - 9.0 (maximum)	
		Phosphorus	0.10	lb/day	Report	Report
Avg Flow (GPD)	<i>Goodyear</i> 680	BOD	0.02	lb/day	4457	2000
		TSS	0.20	lb/day	1058	475
		Ammonia	0.06	lb/day	226	100
		pH	7.00		6.0 (minimum) - 9.0 (maximum)	
		Phosphorus	0.68	lb/day	Report	Report
Total Flow (GPD)	<i>SUM</i> 75,557 25,186	BOD	14.57	lb/day		
		TSS	10.84	lb/day		
		Ammonia	0.40	lb/day		
		pH	7.57			
		Phosphorus	4.35	lb/day		

3.)

Pollutant	Max Allowable HW Load (lbs/day)	Uncontrollable Load (mg/L)	Max Allowable Industrial Load	Max Concentration
BOD	3117.08	481.78	2635.29	3949.78
TSS	1354.68	473.60	745.61	1117.52
Ammonia	652.47	94.67	492.55	738.23
Arsenic	1.63	0.02	1.45	2.17
Chromium	1.36	0.02	1.20	1.80
Copper	0.20	0.08	0.10	0.15
Cyanide	0.19	0.01	0.09	
Lead	0.01	0.00	0.01	0.02
Nickel	0.21	0.02	0.17	0.26
Selenium	0.06	0.02	0.04	0.06
Silver	0.82	0.02	0.72	
Zinc	0.78	0.40	0.30	
Phosphorus		19.61		
Benzene	0.06	0.01	0.05	0.05
Ethylbenzene	5.57	0.01	5.00	5.00
Toluene	7.95	0.03	7.13	7.13
Total Xylene	74.54	0.00	67.08	67.08
Total PAH	0.07	0.00	0.06	0.06

4.) Recommended Limits

25% Allowance of available headworks to IU. Allow 90% SF.

Pollutant	Max Allowable Industrial Load (lbs/day)	Max Concentration (mg/L)	Current Industrial Load (lbs/day)	Current Concentration (mg/L)
BOD	592.94	940.96	14.57	23.114
TSS	167.76	266.23	10.84	17.205
Ammonia	110.82	175.87	0.40	0.628
Arsenic	0.33	0.52	0.0035	0.006
Chromium	0.27	0.43	0.0033	0.005
Copper	0.02	0.0351	0.0122	0.019
Cyanide	0.02	0.032	0.0000	0.000
Lead	0.00	0.00367	0.0007	0.001
Mercury	-0.00010	-0.00016	0.0001	0.000
Nickel	0.04	0.0613	0.0042	0.007
Selenium	0.01	0.0135	0.0248	0.039
Silver	0.16	0.26	0.0033	0.005
Zinc	0.07	0.11	0.0153	0.024

Prepared by:
Turnipseed Engineers