Georgia Power

Plant Yates

Monthly Dewatering Results[1]

July 2020

Prepared by: TETRA TECH

Parameter	Units	Effluent Concentration			Permit Limits		
		Daily Min[3]	Daily Avg[3]	Daily Max[3]	Daily Min	Daily Avg	Daily Max
Flow	MGD	0.00	0.52	0.99	***	***	***
pH	SU	6.5	***	8.1	6.0	***	9.0
Total Suspended Solids	mg/L	ND[2]	1.5	7.5	***	30.0	100.0
Oil and Grease	mg/L	ND	ND	ND	***	15.0	20.0

Parameter	Units	Effluent Concentration					Daily Average
		Week 1	Week 2	Week 3	Week 4	Week 5	
		7/1/2020	7/8/2020	7/15/2020	7/22/2020	7/29/2020	
Turbidity	NTU	1.5	1.5	1.6	1.5	2.5	1.7
Total Dissolved Solids	mg/L	385	378	372	443	545	425
Ammonia	mg/L	0.86	0.80	1.20	1.10	1.20	1.03
Total Kjeldahl Nitrogen	mg/L	1.40	1.10	1.20	1.30	1.10	1.22
Nitrate-Nitrite	mg/L	0.83	0.74	0.38	0.51	0.58	0.61
Organic Nitrogen	mg/L	0.57	ND	ND	ND	ND	0.11
Phosphorus	mg/L	ND	ND	ND	ND	ND	ND
Ortho-Phosphorus	mg/L	ND	ND	ND	ND	ND	ND
Biological Oxygen Demand	mg/L	2.8	ND	ND	3.4	4.6	2.2
Hardness	mg/L	203	208	213	232	300	231

Parameter	Units	Effluent Concentration[4]					Calculated Receiving Water Concentration[4]						Water Quality Criteria[5]	
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 1	Week 2	Week 3	Week 4	Week 5	Average	Acute[6]	Chronic[6]
		7/1/2020	7/8/2020	7/15/2020	7/22/2020	7/29/2020	7/1/2020	7/8/2020	7/15/2020	7/22/2020	7/29/2020			
Arsenic	µg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	340	150
Cadmium	µg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	1	0.43
Chromium[7]	µg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	16	11
Copper	µg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	7	5
Lead	µg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	30	1.2
Nickel	µg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	260	29
Selenium[8]	µg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	***	5
Zinc	µg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	65	65
Mercury	ng/L	ND	ND	ND	8.3	2.5	***	***	***	0.0124	0.0037	0.0032	1400	12

1 Tetra Tech verifies the correct laboratory analysis methods were used, any applicable permit limits have been met and other results are protective of Georgia EPD's water quality standards.

2 ND = Not Detected (below the lab's reporting limit).

3 Daily Min and Daily Max are the lowest and highest values for any day in the month. Daily Avg is the arithmetic average of all daily values during the entire month.

4 Calculated Receiving Water Concentration shows the effluent concentration at the discharge once it has fully mixed in the receiving waterbody. This value is calculated as a dissolved concentration for an appropriate comparison to the numeric water quality criteria, which are also in the dissolved form. Consistent with Georgia EPD, non-detectable effluent concentrations are not translated into Calculated Receiving Water Concentrations.

5 Numeric Water Quality Criteria is the maximum concentration of a parameter (calculated at a default hardness of 50 mg/L as calcium carbonate) established for the receiving waterbody that will be protective of the designated use per Georgia EPD's rules and regulations. Calculated Receiving Water Concentrations less than these criteria are protective of the waterbody.

6 Acute (short-term) water quality criterion to be compared with the weekly calculated receiving water concentration; Chronic (long-term) water quality criterion to be compared with the average calculated receiving water concentration.

7 Numeric water quality criterion shown is for Hexavalent Chromium.

8 The numeric water quality criterion shown is the chronic (long-term) water quality criterion for selenium since this parameter does not have an acute (short-term) water quality criterion.

*** = Not Applicable

mg/L = milligrams per liter = parts per million; µg/L = micrograms per liter = parts per billion; ng/L = nanograms per liter = parts per trillion; SU = Standard Units; MGD = Million Gallons Day

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Monthly Instream Results[1]

July 2020

Prepared by: TETRA TECH

Parameter[3]	Units	Chattahoochee River[2]			
		7/1/2020 **Upstream**	*7/1/2020* **Downstream**	*7/22/2020* **Upstream**	*7/22/2020* **Downstream**
pH	SU	7.0	7.3	6.9	7.0
TSS	mg/L	25.5	24.0	12.5	15.0
O&G	mg/L	ND[4]	ND	ND	ND
Turbidity	NTU	28.0	31.0	20.0	15.4
TDS	mg/L	79	66	117	100
BOD	mg/L	ND	ND	ND	ND
Arsenic	µg/L	ND	ND	ND	ND
Cadmium	µg/L	ND	ND	ND	ND
Chromium	µg/L	ND	ND	ND	ND
Copper	µg/L	ND	ND	ND	ND
Lead	µg/L	2.0	1.1	1.2	4.2
Mercury	ng/L	3.1	3.1	10.6	12.0
Nickel	µg/L	ND	ND	ND	ND
Selenium	µg/L	ND	ND	ND	ND
Zinc	µg/L	12.7	ND	ND	21.6
Ammonia	mg/L	ND	ND	ND	ND
TKN	mg/L	1.10	0.98	0.76	0.74
Nitrate-Nitrite	mg/L	1.70	1.60	2.70	3.00
Organic Nitrogen	mg/L	1.10	0.96	0.76	0.74
Phosphorus	mg/L	0.07	ND	0.06	0.11
Ortho-phosphorus	mg/L	ND	ND	ND	ND
Hardness	mg/L	26	24	35	38

1 Tetra Tech verifies the correct laboratory analysis methods were used.

2 Chattahoochee River measured 1000 ft upstream and 1000 ft downstream from the final discharge at Outfall 01.

3 Metals results are total recoverable.

4 ND = Non-detect

mg/L = milligrams per liter = parts per million; µg/L = micrograms per liter = parts per billion; ng/L = nanograms per liter = parts per trillion; SU = Standard Units; MGD = Million Gallons Day