Plant Mitchell Monthly Dewatering Results¹

Prepared by:



October 2021

	Units	Efflu	ent Concent	ration	Permit Limits			
Parameter		Daily Min ²	Daily Avg ²	Daily Max ²	Daily Min	Daily Avg	Daily Max	
Flow	MGD	0.00	0.22	0.25	***	***	***	
pН	SU	6.6	***	7.7	6.0	***	9.0	
Total Suspended Solids	mg/L	ND^3	ND	ND	***	30.0	100.0	
Oil and Grease	mg/L	ND	ND	ND	***	15.0	20.0	

	Units						
Parameter		Week 1	Week 2	Week 3	Week 4	Week 5	Daily
		No Discharge	10/7/2021	10/14/2021	10/21/2021	10/28/2021	Average
Turbidity ⁴	NTU		0.9	0.7	0.8	0.9	0.8
Total Residual Chlorine ⁴	mg/L		ND	ND	ND	ND	ND
Total Dissolved Solids	mg/L		106	117	128	116	117
Ammonia	mg/L		ND	ND	ND	ND	ND
Total Kjeldahl Nitrogen	mg/L		ND	ND	ND	ND	ND
Nitrate-Nitrite	mg/L		ND	ND	ND	ND	ND
Organic Nitrogen	mg/L		ND	ND	ND	ND	ND
Phosphorus	mg/L		ND	ND	ND	ND	ND
Ortho-Phosphorus	mg/L		ND	ND	ND	ND	ND
Biological Oxygen Demand	mg/L		ND	ND	ND	ND	ND
Hardness	mg/L		45	46	46	47	46

		Effluent Concentration ⁵					Calculated Receiving Water Concentration⁵						Water Quality Criteria ⁶	
Parameter	Units	Week 1	Week 2	Week 3	Week 4	Week 5	Week 1	Week 2	Week 3	Week 4	Week 5			
		No Discharge	10/7/2021	10/14/2021	10/21/2021	10/28/2021	No Discharge	10/7/2021	10/14/2021	10/21/2021	10/28/2021	Average	Acute ⁷	Chronic ⁷
Arsenic	μg/L		ND	ND	ND	ND		***	***	***	***	***	340	150
Cadmium	μg/L		ND	ND	ND	ND		***	***	***	***	***	0.94	0.43
Chromium ⁸	μg/L		ND	ND	ND	ND		***	***	***	***	***	16	11
Copper	μg/L		ND	ND	ND	ND		***	***	***	***	***	7	5
Lead	μg/L		ND	ND	ND	ND		***	***	***	***	***	30	1.2
Nickel	μg/L		ND	ND	ND	ND		***	***	***	***	***	260	29
Selenium ⁹	μg/L		7.6	7.8	5.3	ND		0.0039	0.0040	0.0027	***	0.0026	***	5
Zinc	μg/L		ND	ND	ND	ND		***	***	***	***	***	65	65
Mercury	ng/L		ND	ND	ND	ND		***	***	***	***	***	1400	12

- 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.

 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.

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

 Turbidity and total residuals chlorine are monitored continuously. The value reported is the weekly maximum and the daily average is the average of the weekly maximum values reported.

 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 form. Consistent with Georgia EPD, non-detectable effluent concentrations are not intensified into Calculated Receiving Water Concentration for an appropriate comparison to the numeric water quality criteria is the maximum concentration of a parameter (calculated at a default hardness of 50 mg/l. acidum 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 water quality criterion shown is for Hexavalent Chromium.

 Numeric water quality criterion shown is to Hexavalent Chromium.

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Plant Mitchell Monthly Instream Results¹



October 2021

		Flint River ²						
Parameter ³	Units	10/14/2021	10/14/2021	10/21/2021	10/21/2021			
		Upstream	Downstream	Upstream	Downstream			
рН	SU	6.2	6.2	6.7	6.6			
TSS	mg/L	15.5	15.5	3.2	2.8			
O&G	mg/L	ND^4	ND	ND	ND			
TRC	mg/L	ND	0.01	0.01	0.02			
Turbidity	NTU	39.3	37.7	15.8	15.3			
TDS	mg/L	76	80	84	77			
BOD	mg/L	2.2	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	1.0	1.0	ND	ND			
Mercury	ng/L	5.3	5.3	2.8	3.0			
Nickel	μg/L	ND	ND	ND	ND			
Selenium	μg/L	ND	ND	ND	ND			
Zinc	μg/L	ND	ND	ND	ND			
Ammonia	mg/L	ND	ND	ND	ND			
TKN	mg/L	0.79	0.76	0.29	0.30			
Nitrate-Nitrite	mg/L	0.27	0.27	0.55	0.55			
Organic Nitrogen	mg/L	0.76	0.73	ND	ND			
Phosphorus	mg/L	0.07	0.07	ND	ND			
Ortho-phosphorus	mg/L	ND	0.03	ND	ND			
Hardness	mg/L	21	20	37	36			

- 1 Tetra Tech verifies the correct laboratory analysis methods were used.
- $2 \quad \text{Flint River measured 500 ft upstream and 500 ft downstream from the final discharge at Outfall 01B}.\\$
- 3 Metals results are total recoverable.
- 4 ND = Non-detect

mg/L = milligrams per liter = parts per million; $\mu g/L = micrograms$ per liter = parts per billion; ng/L = micrograms per liter = parts per trillion; SU = Standard Units; MGD = Million Gallons Day