



Plant Bowen Monthly Dewatering Results¹ October 2022

	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	0.35	0.38	***	***	***	
pН	SU	7.1	***	7.8	6.0	***	9.0	
Total Suspended Solids	mg/L	ND ³	ND	ND	ND	30.0	100.0	
Oil and Grease	mg/L	ND	ND	ND	ND	15.0	20.0	

Parameter	Units	Week 1	Week 2	Week 3	Week 4	Week 5	Daily	
	Units	10/3/2022	No Discharge	10/17/2022	10/24/2022	Sampled in November	Average	
Turbidity ⁴	NTU	0.7		1.5	0.9		1.0	
Total Residual Chlorine ⁴	mg/L	ND		ND	ND		ND	
Total Dissolved Solids	mg/L	2100		2160	2070		2110	
Ammonia	mg/L	0.19		0.10	0.12		0.14	
Total Kjeldahl Nitrogen	mg/L	0.81		0.79	0.82		0.81	
Nitrate-Nitrite	mg/L	0.04		ND	ND		0.01	
Organic Nitrogen	mg/L	0.62		0.68	0.70		0.67	
Phosphorus	mg/L	ND		ND	ND		ND	
Ortho-Phosphorus	mg/L	ND		ND	ND		ND	
Biological Oxygen Demand	mg/L	ND		ND	ND		ND	
Hardness	mg/L	1390		1420	1540		1450	

		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			
	10/3/2022	No Discharge	10/17/2022	10/24/2022	Sampled in November	10/3/2022	No Discharge	10/17/2022	10/24/2022	Sampled in November	Average	Acute ⁷	Chronic ⁷	
Antimony ⁹	μg/L	6.3		6.3	5.4		0.0151		0.0151	0.0129		0.0143	***	640
Arsenic	μg/L	ND		5.2	7.3		***		0.0124	0.0175		0.0100	340	150
Cadmium	μg/L	ND		ND	ND		***		***	***		***	0.94	0.43
Chromium8	μg/L	ND		ND	ND		***		***	***		***	16	11
Copper	μg/L	ND		ND	ND		***		***	***		***	7	5
Lead	μg/L	ND		ND	ND		***		***	***		***	30	1.2
Nickel	μg/L	ND		ND	ND		***		***	***		***	260	29
Selenium ⁹	μg/L	63.4		61.3	61.1		0.1516		0.1466	0.1461		0.1481	***	5
Thallium9	μg/L	1.7		1.6	1.3		0.0041		0.0038	0.0031		0.0037	***	0.47
Zinc	μg/L	ND		ND	ND		***		***	***		***	65	65
Mercury	ng/L	ND		0.6	1.0		***		0.0015	0.0023		0.0012	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 Ang is the arithmetic average of all daily values during the entire month.

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

 Turbidity and total residual 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 Concentrations 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.

 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 are protective of the waterbody.

 Acute (short-term) water quality criterion to be compared with the average calculated receiving water concentration.

 Numeric water quality criterion shows in 6 or Heavasyatent Chromium.

 The numeric water quality criterion shows are the chronic (long-term) water quality criterion to have an acute (short-term) water quality criterion.

- and regulations. Calciuateux reconstructions of the second and regulations and regulations. Calciuateux reconstructions of the second and regulations are reconstructed as a second control of the second and regulations are reconstructed as a second and regulations are reconstructed as a second and regulations are reconstructed as a second and regulations. Second as a second and regulations are reconstructed as a second and regulations are reconstructed as a second and regulations. Second and regulations are reconstructed as a second and regulations are reconstructed as a second and regulations. Second and regulations are reconstructed as a second and regulations are reconstructed as a second and regulations. Second and regulations are reconstructed as a second as



Plant Bowen Monthly Instream Results¹

Prepared by:



October 2022

		Etowah River ²							
Parameter ³	Units	10/3/2022 Upstream	10/3/2022 Downstream	10/24/2022 Upstream	10/24/2022 Downstream				
рН	SU	7.2	7.2	6.9	6.5				
TSS	mg/L	ND^4	ND	ND	ND				
O&G	mg/L	ND	ND	ND	ND				
TRC	mg/L	***	***	***	***				
Turbidity	NTU	1.5	1.8	1.4	1.6				
TDS	mg/L	61	55	65	62				
BOD	mg/L	ND	ND	ND	ND				
Antimony	μg/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	ND	ND	ND	ND				
Mercury	ng/L	ND	ND	1.0	1.0				
Nickel	μg/L	ND	ND	ND	ND				
Selenium	μg/L	ND	ND	ND	ND				
Thallium	μg/L	ND	ND	ND	ND				
Zinc	μg/L	ND	ND	ND	ND				
Ammonia	mg/L	0.57	ND	ND	ND				
TKN	mg/L	2.00	ND	0.58	ND				
Nitrate-Nitrite	mg/L	0.49	0.46	0.47	0.47				
Organic Nitrogen	mg/L	1.40	ND	0.58	ND				
Phosphorus	mg/L	ND	ND	ND	ND				
Ortho-phosphorus	mg/L	ND	ND	ND	ND				
Hardness	mg/L	36	37	43	42				

- 1 Tetra Tech verifies the correct laboratory analysis methods were used.
- 2 Etowah River measured 1000ft upstream and 1000ft downstream of the Final Plant Discharge (Outfall 001)
- 3 Metals results are total recoverable.
- 4 ND = Non-detect
- *** = Not Applicable

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