

BASIS FOR DECISION MEMO

Permit Processor: Bradley Popovich
 Date: August 9, 2018
 Permit No. MI0020729
 Facility's Designated Name: Bronson WWTP

Monitoring Point 001A: Authorization to discharge 0.5 MGD of treated municipal wastewater from Monitoring Point 001A through Outfall 001. Outfall 001 discharges to County Drain #30.

<u>Parameter</u>	<u>Maximum Limits for Quantity or Loading</u>				<u>Maximum Limits for Quality or Concentration</u>				<u>Monitoring Frequency</u>	<u>Sample Type</u>	<u>Basis for Limits</u>
	<u>Monthly</u>	<u>7-Day</u>	<u>Daily</u>	<u>Units</u>	<u>Monthly</u>	<u>7-Day</u>	<u>Daily</u>	<u>Units</u>			
Flow	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily Flow	PWJ
Carbonaceous Biochemical Oxygen Demand (CBOD ₅)											
May – September	17	42	(report)	lbs/day	4	---	10	mg/l	5x Weekly	24-Hr Composite	AWT
October – November	29	46	(report)	lbs/day	7	---	11	mg/l	5x Weekly	24-Hr Composite	WQBEL
December – March	83	130	(report)	lbs/day	20	---	30	mg/l	5x Weekly	24-Hr Composite	WQBEL/AD
April	17	42	(report)	lbs/day	4	---	10	mg/l	5x Weekly	24-Hr Composite	AWT/AD
Total Suspended Solids (TSS)											
April – September	83	130	(report)	lbs/day	20	30	(report)	mg/l	5x Weekly	24-Hr Composite	AWT
October – November	92	140	(report)	lbs/day	22	33	(report)	mg/l	5x Weekly	24-Hr Composite	PWJ
December – March	130	190	(report)	lbs/day	30	45	(report)	mg/l	5x Weekly	24-Hr Composite	STS
Ammonia Nitrogen (as N)											
May – September	2.1	8.3	(report)	lbs/day	0.5	---	2	mg/l	5x Weekly	24-Hr Composite	AWT
October – November	---	8.8	(report)	lbs/day	---	---	2.1	mg/l	5x Weekly	24-Hr Composite	WQBEL
December – March	---	42	(report)	lbs/day	---	---	10	mg/l	5x Weekly	24-Hr Composite	WQBEL/AD
April	---	23	(report)	lbs/day	---	---	5.5	mg/l	5x Weekly	24-Hr Composite	WQBEL/AD
Fecal Coliform Bacteria	---	---	---	---	200	400	(report)	cts/100 ml	5x Weekly	Grab	WQS
	12-Month Rolling Total <i>12-Month Rolling Total</i>										
Total Phosphorus (as P)	770	---	(report)	lbs/year	0.5	---	(report)	mg/l	Weekly	24-Hr Composite	WQBEL

<u>Parameter</u>					<u>Minimum % Monthly</u>		<u>Minimum % Daily</u>	<u>Units</u>	<u>Monitoring Frequency</u>	<u>Sample Type</u>	<u>Basis for Limits</u>
Total Suspended Solids Minimum % Removal											
December - March	---	---	---	---	85	---	(report)	%	Monthly	Calculation	STS
					<u>Minimum Daily</u>		<u>Maximum Daily</u>				
pH	---	---	---	---	6.5	---	9.0	S.U.	Daily	Grab	WQS
Dissolved Oxygen											
May – November <i>October – November</i>	---	---	---	---	6.0	---	---	mg/l	Daily	Grab	WQBEL
December – April <i>December - September</i>	---	---	---	---	5.0	---	---	mg/l	Daily	Grab	WQBEL

PERMIT CONDITIONS:

Final Effluent Limitations, Monitoring Point 001A

Quantification Levels and Analytical Methods for Selected Parameters

Inflow and Infiltration Reduction Plan

Untreated or Partially Treated Sewage Discharge Reporting and Testing Requirements

Facility Contact

Monthly Operating Reports

Schedule of Compliance Not Required

Storm Water Pollution Prevention (not required)

Michigan Industrial Pretreatment Program

Residuals Management Program for Land Application of Biosolids

NOTES:
The facility was utilizing an inappropriate method for the analysis of total mercury. Because of this, quarterly total mercury monitoring using USEPA method 1669 and analysis with USEPA method 1631 were originally recommended within the WQBEL-Toxics memo (08/2016); However, guidance from the Pretreatment Coordinating Committee (PCC) (07/2018) stated that smaller WWTPs should not be burdened with the expense of low level mercury monitoring. This guidance resulted in an updated WQBEL-Toxics memo being drafted that included no recommendations for total mercury.

District compliance staff has recommended the draft permit include an Inflow and Infiltration Reduction Plan in order to assist the facility with flow problems.

Less stringent limits are recommended for the daily maximum concentration and loading of Carbonaceous Biochemical Oxygen Demand (CBOD₅) for the months of December through April. Based on review of the facility's existing effluent quality, Permits Section determined that it is appropriate to retain the current limits under antidegradation

Less stringent limits are recommended for Ammonia Nitrogen (as N) for the months of December – April. Based on review of the facility's existing effluent quality, Permits Section determined that it is appropriate to retain the current limits under antidegradation.

Limit Change Key

Normal Type = existing requirement - carried over from previous version of permit

Bold Type = new requirement - not in previous version of permit

Italic = deleted requirement - not carried over from previous version of permit

Basis for Limits Key

WQBEL - Water Quality-Based Effluent Limit

STS - Secondary Treatment Standard

AWT - Advanced Wastewater Treatment

WQC - Water Quality Concern

WQS - Water Quality Standard

PWJ - Permit Writer's Judgment

AD – Antidegradation