BASIS FOR DECISION MEMO

Permit Processor: Bradley Popovich Date: February 8, 2022 Permit No. MI0021377

Designated Site Name: Hudson WWTP

Monitoring Point 001A: Authorization to discharge 0.41 MGD of treated municipal wastewater from Monitoring Point 001A through Outfall 001. Outfall 001 discharges to Bean Creek.

	Maximum Limits for Quantity or Loading						Limits for oncentration		Monitoring	Sample	Basis for
<u>Parameter</u>	Monthly	7-Day	<u>Daily</u>	<u>Units</u>	<u>Monthly</u>	7-Day	<u>Daily</u>	<u>Units</u>	Frequency	<u>Type</u>	<u>Limits</u>
Flow	(report)		(report)	MGD					Daily	Report Total Daily Flow	PWJ
Carbonaceous Biochemical Oxygen Demand (CBOD₅)											
May - September	14 /2 <i>4</i>	34	(report)	lbs/day	4/7		10	mg/l	5x Weekly	24-Hr Composite	AWT
October – November	79 /85	120 / <i>140</i>	(report)	lbs/day	23 /25		35 /40	mg/l	5x Weekly	24-Hr Composite	WQBEL
December – April	85	140	(report)	lbs/day	25	40	(report)	mg/l	5x Weekly	24-Hr Composite	STS
Total Suspended Solids (TSS)											
May - September	68	100	(report)	lbs/day	20	30	(report)	mg/l	5x Weekly	24-Hr Composite	PWJ
October – April	100	150	(report)	lbs/day	30	45	(report)	mg/l	5x Weekly	24-Hr Composite	STS/PWJ
Ammonia Nitrogen (as N)											
May - September	1.7/	6.8	(report)	lbs/day	0.5/		2.0	mg/l	5x Weekly	24-Hr Composite	AWT
October – November	(report)	44 /48	(report)	lbs/day	(report)		13 /14	mg/l	5x Weekly	24-Hr Composite	WQBEL
December – April		(report)	(report)	lbs/day			(report)	mg/l	5x Weekly	24-Hr Composite	WQC
Total Phosphorus (as P)	3.4		(report)	lbs/day	1.0		(report)	mg/l	5x Weekly/ Weekly	24-Hr Composite	WQBEL
Chloride					(report)		(report)	mg/l	Monthly	24-Hr Composite	WQC
Sulfate					(report)		(report)	mg/l	Monthly	24-Hr Composite	WQC
Fecal Coliform Bacteria					200	400	(report)	cts/100 ml	5x Weekly	Grab	WQS
Total Residual Chlorine							38	ug/l	5x Weekly	Grab	WQBEL

Designated Site Name: Hudson WWTP

Permit No. MI0021377

Page 2 of 3

Parameter			Minimum % Monthly	Minimum % <u>Daily</u>	<u>Units</u>	Monitoring Frequency	Sample <u>Type</u>	Basis for <u>Limits</u>
CBOD ₅ Minimum % Removal								
December – April	 	 	85	 (report)	%	Monthly	Calculation	STS
TSS Minimum % Removal								
October – April	 	 	85	 (report)	%	Monthly	Calculation	STS
			Minimum <u>Daily</u>	Maximum <u>Daily</u>				
рН	 	 	6.5	 9.0	S.U.	5x Weekly	Grab	WQS
Dissolved Oxygen								
May – November	 	 	5.0	 	mg/l	5x Weekly	Grab	WQBEL
December – April	 	 	3.0	 	mg/l	5x Weekly	Grab	WQBEL

PERMIT CONDITIONS:

Final Effluent Limitations, Monitoring Point 001A

Quantification Levels and Analytical Methods for Selected Parameters

Untreated or Partially Treated Sewage Discharge Reporting and Testing Requirements

Facility Contact

Monthly Operating Reports

Continuous Monitoring

Inflow and Infiltration Reduction Program

Storm Water Pollution Prevention (not required)

Industrial Waste Pretreatment Program

Residuals Management Program for Land Application of Biosolids

NOTES:

For information pertaining to the non-attainment status for certain designated uses of the receiving water and how it informed the establishment of certain permit conditions, see the Department's document named "WQBELBiologistFactSheet_MI0021377_01-11-2022.pdf."

Monitoring requirements for chloride and sulfate have been included in the draft permit in accordance with the Department's Chloride and Sulfate Water Quality Values Implementation Plan.

Based on internal review of flow data provided within the past permit cycle, Inflow and Infiltration Reduction Program language has been added to the draft permit. This condition will establish a program to reduce I/I and includes an annual submittal requirement to summarize progress towards this goal.

Designated Site Name: Hudson WWTP

Permit No. MI0021377

Page 3 of 3

<u>Limit Change Key</u> 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