

February Superintendents report

3/11/2025

February numbers were as follows:

Average flow = 16.21 MGD with a sum of 453.83 million gallons. CBOD 8 mg/L and 95% removal. TSS of 3.8 mg/L with 98% removal. Fecals of 2 MPN. Precipitation of 3.17 inches. Our average influent temp was 9.9 Deg C, 49.82 Deg F. NH₃ of 0.40 mg/L for 97% conversion. Phos of 0.15 mg/L for 97% removal. With 3 data points to go TN is averaging 2.7 mg/L for approx. 88% removal. Volatile Solids Reduction (VSR) for Digester #1 was 63.31%, Digester #2 was 62.62%, and Digester #3 was 59.07%. VSR needs to be Greater than 38% and minimum 15-day Sludge Retention Time (SRT).

It has been 952 days since starting up after the Viewport failure. For Total Nitrogen, we have met Permit 30 of the 31 months we have been operational. It took 1 month to re-start the process.

David Elman just completed Basic Ops class at Morrisville.

The TPS project 90% drawings were gone through with EDR last week.

We will be hosting the local Kirkwood DEC team for a plant tour on Monday 3/17/2025.

Rachel has been investigating a more cost-effective disposal solution for our UV lamps. There is a potential for 1000s of dollars worth of savings due to her research.

Superintendents Summary Report for 2025																												
	FLOW	Precip	CBOD5			REM	Tot Susp Solids			REM	Settleable Solids			REM	Total Nitrogen			REM	Phosphorous			REM	Ammonia		CON	TKN		REM
	MGD	Inches	In	out	%	In	out	%	In	out	%	In	out	%	In	out	%	In	out	%	In	out		In	out			
	AVG		Limit				Limit				Limit				Limit				Monitor			Monitor						
			18 mg/L				20 mg/L				0.3 mL/L				6.0 mg/L				1.0 mg/L			1800 lbs./Day			11000 lbs/Day			
Jan	14.56	1.06	200	8	96%	193	4.6	98%	11.90	0.10	99%	23.5	2.8	88%	6.44	0.220	97%	13.5	0.25	98%	23.3	1.3	94%					
Feb	16.21	3.17	171	8	95%	161	3.6	98%	11.60	0.10	99%	21.8	2.9	87%	5.45	0.150	97%	12.8	0.40	97%	21.2	1.5	93%					
Mar																												
Apr																												
May																												
Jun																												
Jul																												
Aug																												
Sep																												
Oct																												
Nov																												
Dec																												
		TOT																										
Avg	15.39	4.23	186	8	96%	177	4.1	98%	11.75	0.10	99%	22.7	2.9	88%	5.95	0.185	97%	13.2	0.33	98%	22.3	1.4	94%					
Average Ammonia Lbs/Day = 61 lbs.																												
Average TKN Lbs/Day = 219 lbs.																												
Ammonia limit equates to approx 6 mg/L monthly Avg.(Monitor Only) / TKN limit equates to 38 mg/L Monthly Avg. (Monitor Only)																												
TN limit is 6.0 mg/L From OO1 (New Limit, Was Monitor) REM = Removal %																												
The Permit for TN = Rolling 12 Month SUM, from Outfall OO1, (Was O1A) Not to Exceed 639,261 lbs.																												
Outfall OO1 includes Flow Through O1B (DN Cell Bypass) (Above 35 MGD)																												
These numbers represent Outfall from OO1																												

Landfill 2025 Summary

Date	Digested	Lime Stab	Solids Total		Bar screen	Grit and Screen		Grease
	Tons	Tons	Tons	Cost	Tons	Tons	Cost	Tons
January	680.33		680.33	\$28,074.50		19.14	\$861.30	
February	653.39		653.39	\$26,135.60		21.40	\$965.70	
March								
April								
May								
June								
July								
August								
September								
October								
November								
December								
Average	666.86		666.86	\$27,105.05		20.27	\$913.50	
Sub Total	1,333.72		1,333.72	\$54,210.10		40.54	\$1,827.00	
				\$40/Ton			\$45/Ton	

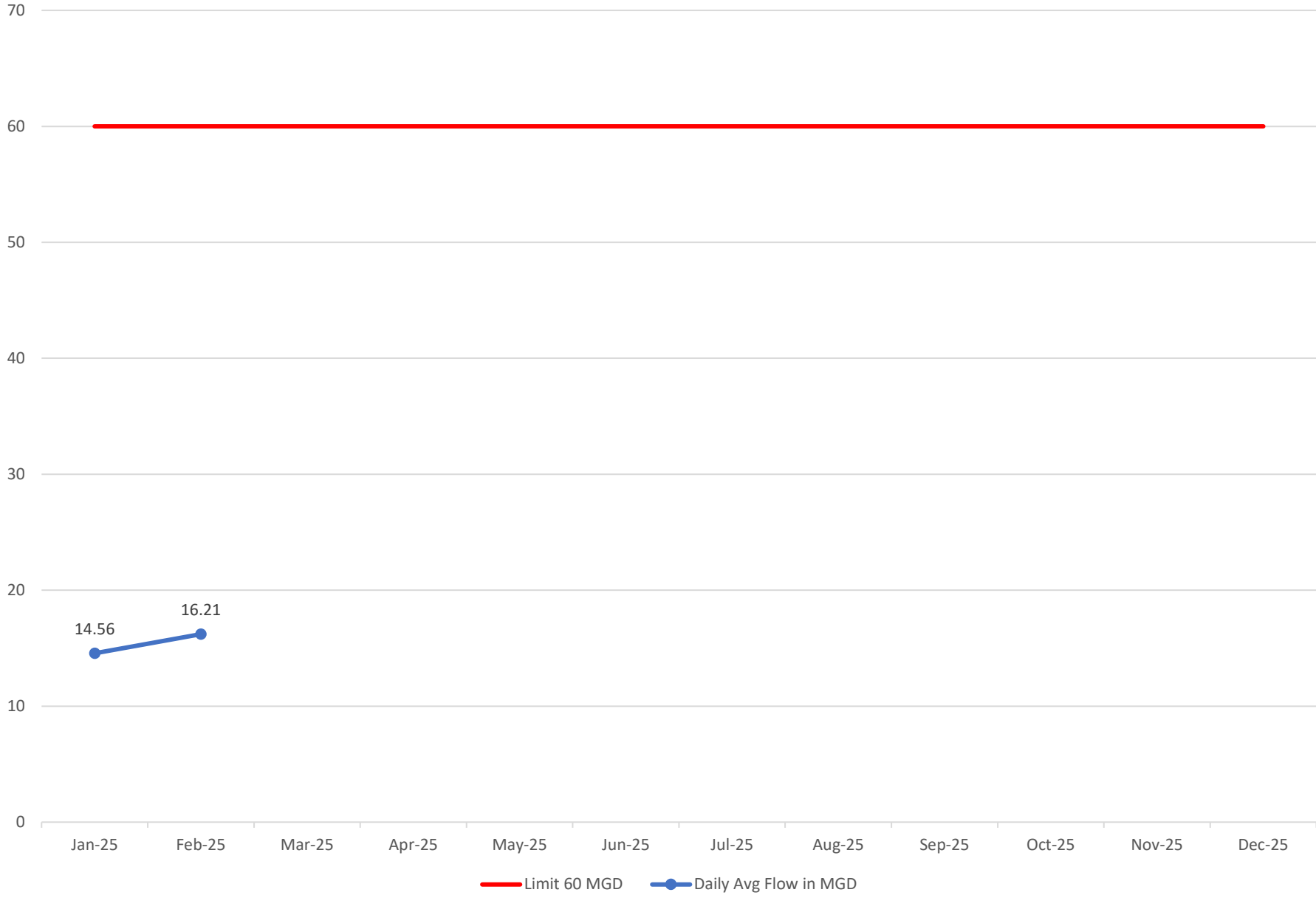
\$56,037.10

Annual Cost to Date

\$420,000 budgeted for 2025 /

ES8130.54804

2025 Avg Daily Flow

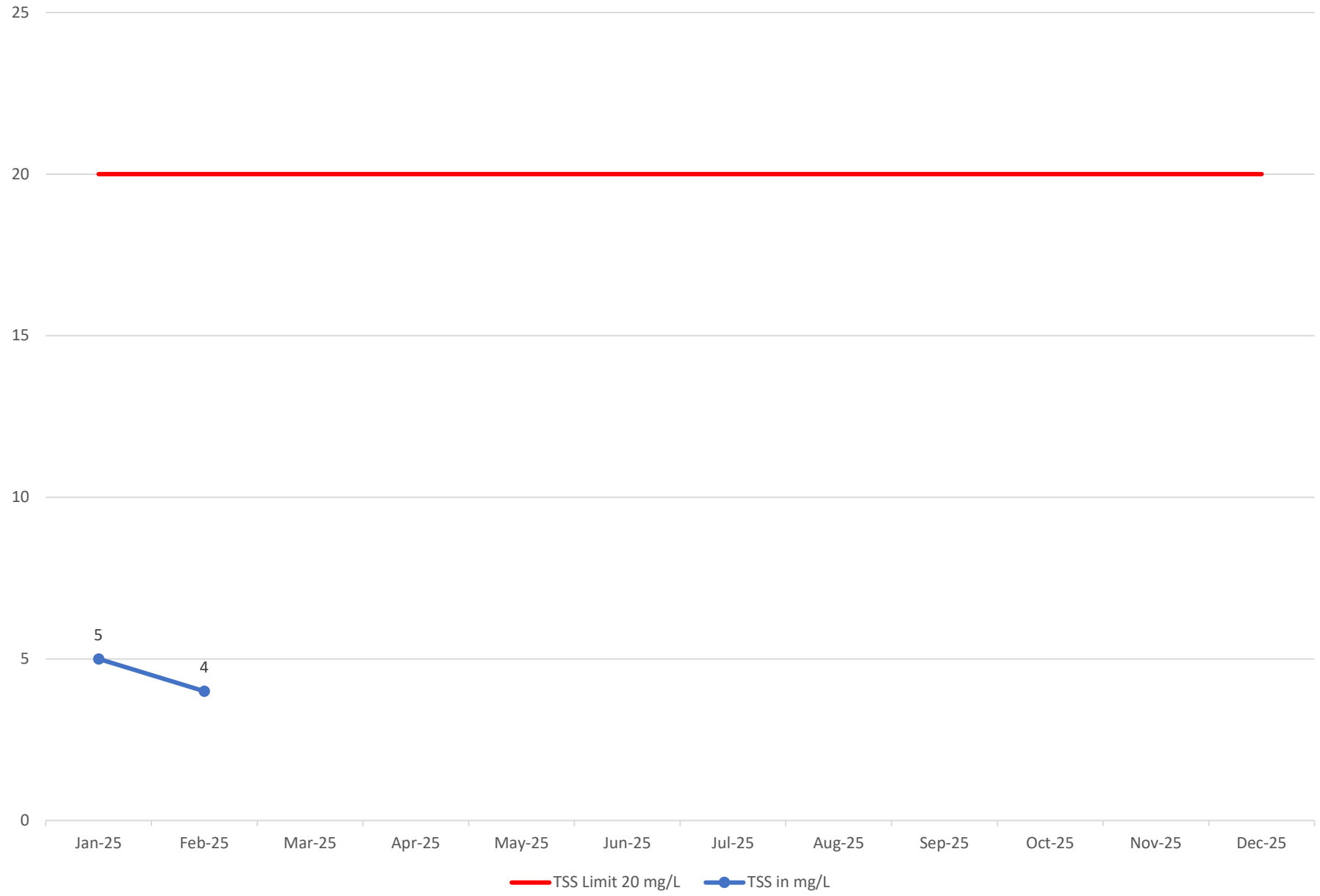


2025 CBOD

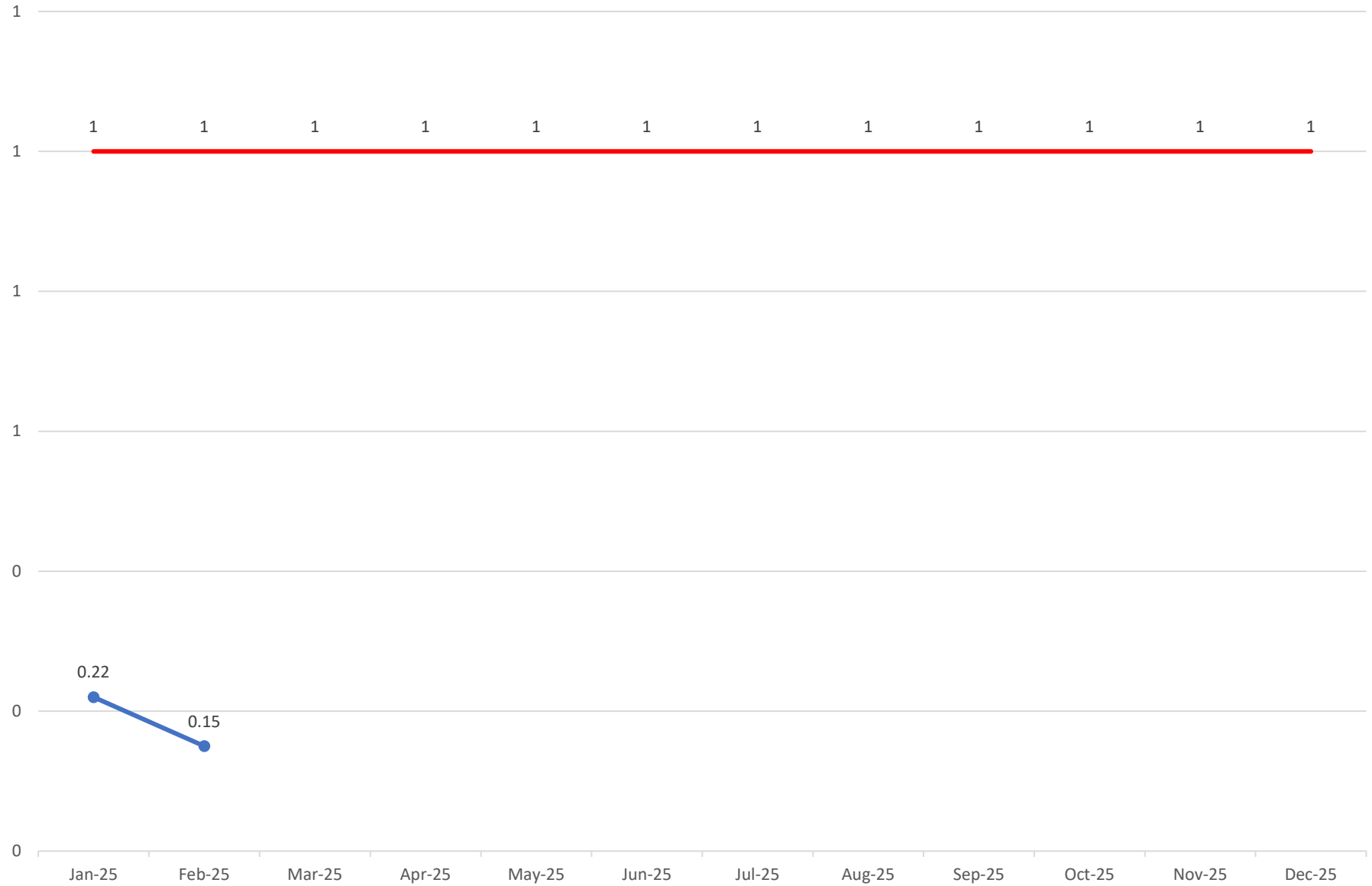


— CBOD Limit 18 mg/L —●— CBOD in mg/L

2025 TSS

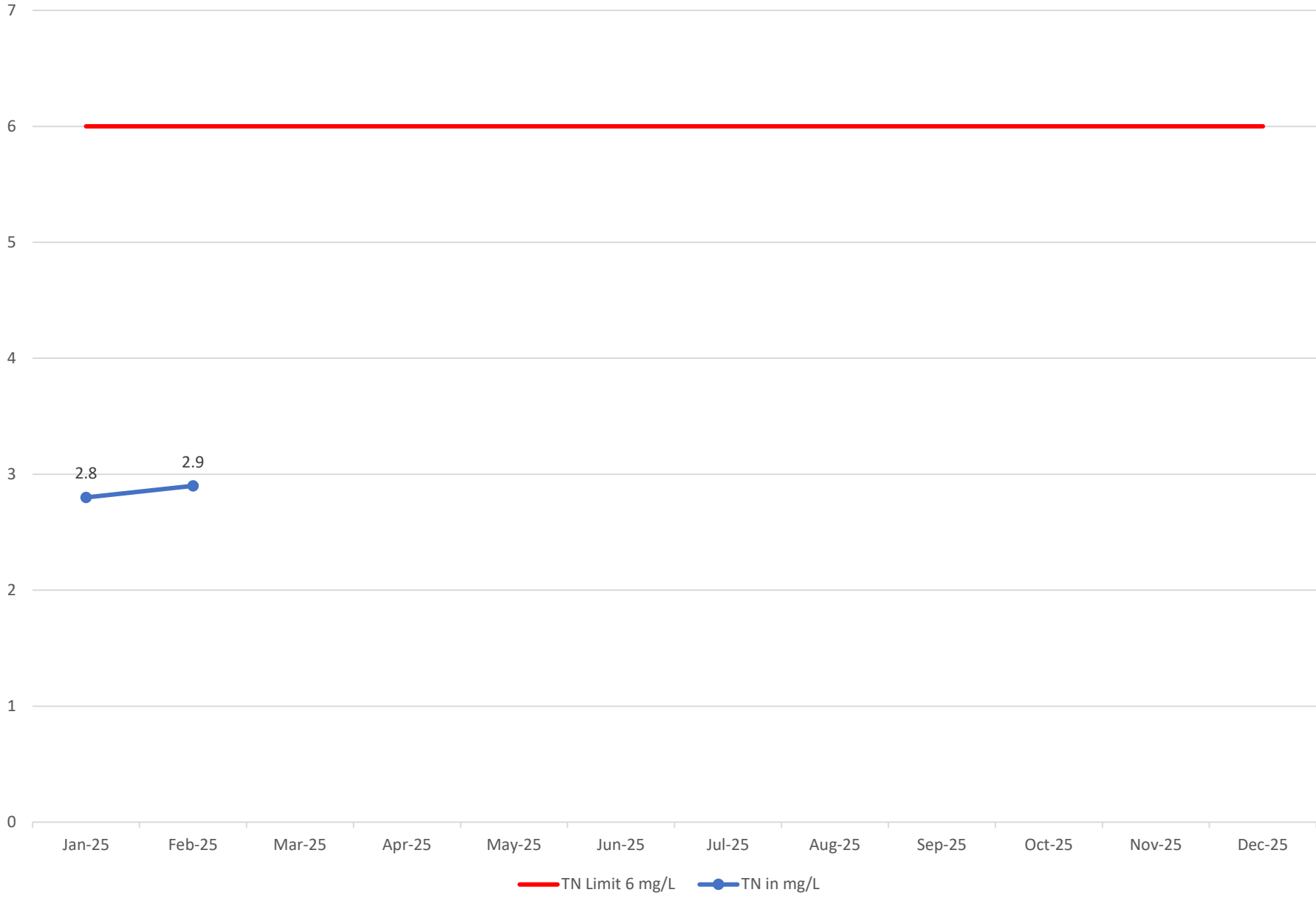


2025 Phos



— Phos Limit 1 mg/L ●— Phos in mg/L

2025 TN



12 Month Rolling Avg. and 12 Month Rolling Sum												
INF TN 12 Mo	INF TN SUM	TN Month	EFF TN SUM	INF Phos 12 Mo	INF Phos	EFF Phos	EFF Phos	Merc ng/l	TOT Q	Precip		
Rolling avg mg/L	Lbs/Mo T	avg mg/L	Lbs/Mo R	Rolling Avg mg/L	Calc SUM Lbs T	Roll avg mg/L	Calc Sum Lbs R	beg Apr 2020	Beg Apr 2020			
14.2	84063	4.80	30280	2.60	15094	0.358	2081	1.000	24.33	4.10	Mar	2024
14.9	82511	4.40	25414	3.19	16937	0.459	2456	0.884	22.87	4.42	Apr	2024
20.4	84226	4.00	17421	3.10	12670	0.421	1719	0.922	16.12	3.67	May	2024
25.6	79691	2.00	6458	4.02	12006	0.564	1681	0.773	12.56	3.09	June	2024
21.4	72383	2.30	9238	3.74	13434	0.480	1882	0.855	13.79	6.02	July	2024
18.2	76621	3.20	15676	3.57	14149	0.290	1163	1.410	18.35	7.14	Aug	2024
27.8	77636	3.80	10781	4.63	13799	0.480	1428	0.619	11.16	1.94	Sep	2024
34.1	82771	2.20	5403	5.37	13526	0.750	1844	0.798	9.49	1.53	Oct	2024
30.0	81944	3.30	11854	6.30	17988	0.471	1286	0.506	12.26	3.67	Nov	2024
18.2	76491	2.60	13054	4.60	18534	0.190	804	0.479	17.47	3.15	Dec	2024
23.5	85785	2.80	10685	6.40	21896	0.220	760	0.588	14.56	1.06	Jan	2025
21.8	79647	2.90	11615	5.50	19238	0.150	565	0.890	16.21	3.17	Feb	2025
22.5	963769	3.19	167879	4.42	189271	0.403	17669	0.810	15.76	42.96		
INF TN 12 Mo	SUM Total Calc	12 Mo AVG	Sum Total/Calc	INF Phos 12 Mo	Sum Total Calc	12 Mo AVG	Sum Total/Calc	Mercury	TOT Q	SUM TOT		
Rolling avg mg/L	12 Mo INF TN	mg/L	12 Mo EFF TN	Rolling Avg mg/L	12 Mo INF Phos	mg/L	12 mo EFF Phos	12 mo rolling	12 mo rolling	12 mo Rolling		
MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX		
34.1	85785.0	4.8	30280.0	6.4	21896.0	0.8	2456.0	1.4	24.3	7.1		
			Limit			Limit	Limit	Limit	Limit			
			639,261			6.0	106,543	12.00	35.00			

Removal Rates and Process Type by Year

Date	Flows MGD	% Removal BOD	% Removal TSS	Effluent Mthly. Avg. BOD mg/l	Effluent Mthly.Avg. TSS mg/l	
2003	23.81	81	78	26	26	Activated Sludge Process
2004	22.05	59	74	57	33	Activated Sludge Process
2005	19.98	34	58	113	64	Activated Sludge Process
2006	20.49	37	71	101	39	Construction
2007	19.90	46	76	99	36	Start up of BioFor
2008	21.06	88	92	16	8	BioFor Secondary
2009	17.45	96	98	7	4	BioFor Secondary
2010	17.65	94	97	11	5	BioFor Secondary
2011	25.41	73	78	34	25	Wall Collapse / Flood
2012	18.40	32	67	111	47	Primary Only
2013	16.85	34	66	107	46	Primary Only
2014	16.37	41	71	115	65	Primary Only
2015	15.18	40	76	118	50	Primary Only
2016	13.29	37	80	143	52	Primary Only
2017	17.26	42	69	127	60	Primary Only / Construction
2018	20.79	44	67	110	56	Primary Only / Construction
2019	17.99	65	82	73	37	Start up of BioStyr
2020	15.50	93	95	13	9	BioStyr
2021	18.24	95	96	10	8	BioStyr
2022	16.62	76	91	40	15	BioStyr / Viewport
2023	17.76	95	96	9	6	BioStyr
2024	16.96	96	98	7	4	BioStyr
2025						