

Monthly Operating Report

AUGUST 2024



Rockland, MA WWTP





September 15, 2024

Mr. Chuck Heshion

Rockland Sewer Commission Chairman

587 Rear Summer Street

Rockland, MA 02370

RE: Rockland Wastewater Facility

Monthly Report—August 2024

Dear Mr. Heshion,

I have enclosed August's 2024 Monthly Operating Report (MOR) for the Veolia Operations and Maintenance contract.

Please contact me if you should you have any questions regarding this report.

Sincerely,

Megan Lynch

Veolia Project Manager

Jesse FreemanVeolia

Assistant Project Manager

CC:

Daniel Duross

Sherri Vallie

AUGUST 2024 MONTHLY OPERATING REPORT

1. SUMMARY:

The facility will be reporting **0** exceedance for the month of August 2024

- 1) There was **0** lost time / first aid injuries throughout the month
- 2) The facility treated a total of **50.105** Million Gallons. The average daily flow was **1.616** MGD
- 3) The total rainfall for this reporting period was **4.54"**
- 4) I&I Work is ongoing
- 5) **128** work orders were closed in June, with **17** as corrective maintenance work order and **13** were emergency call outs
- 6) Massachusetts general wastewater permit began April 1st, 2023.

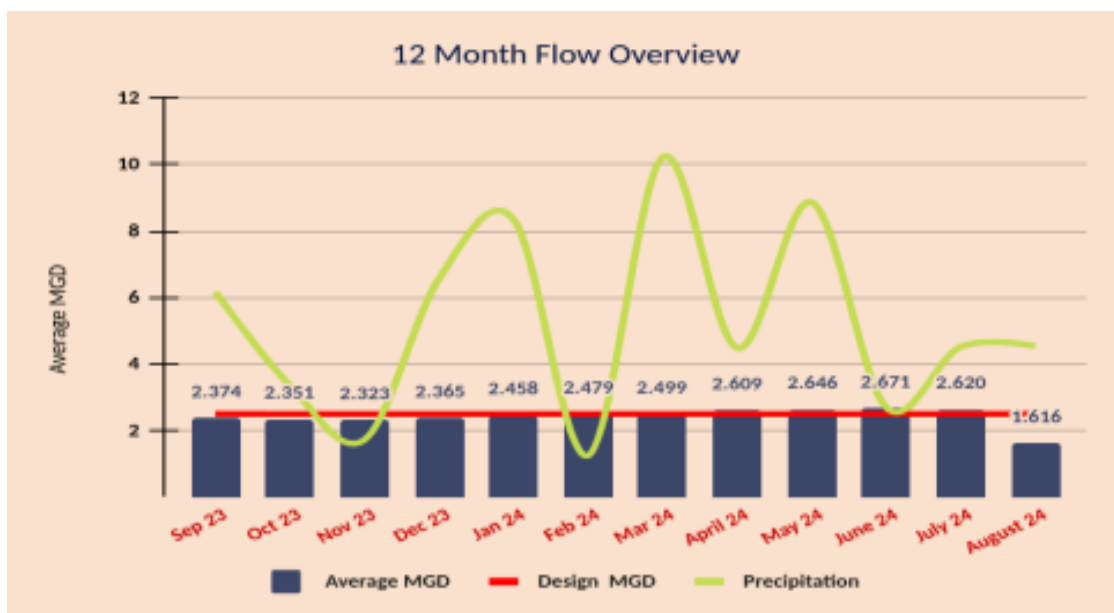
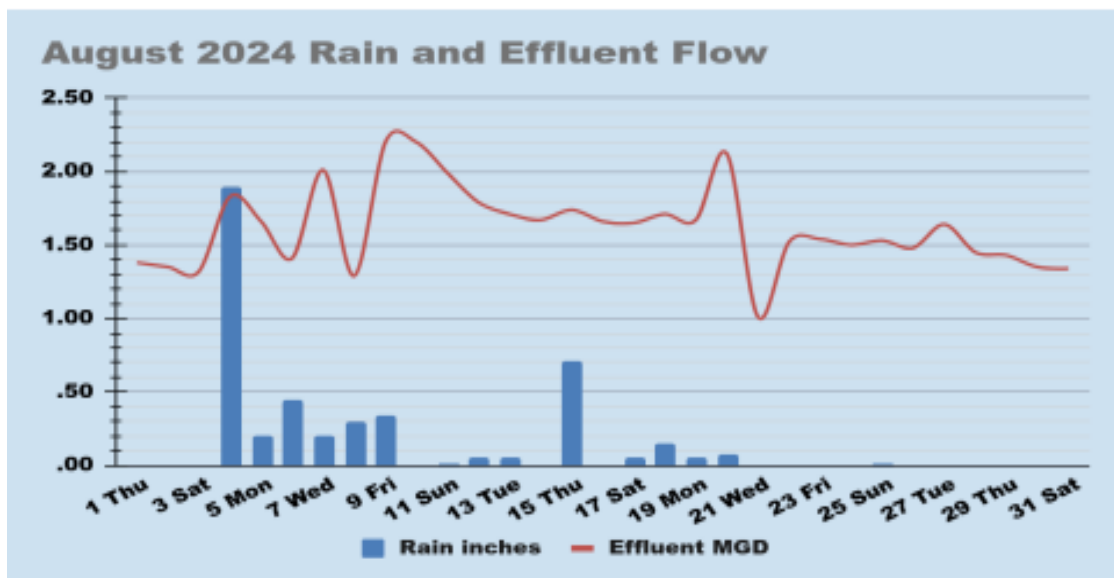
2. STAFFING:

Current Employee Licenses as of 08/31/2024											
		Hoisting		Wastewater				NEWEA Collections			NEWEA Laboratory
Employee	Title	1C Forklift	1B Boom Truck & Forklift	3M	5C	6C	7C	I	II	IV	I
Megan Kelly-Lynch	Asst. Project Manager	X					X				
Jesse Freeman	Asst. Project Manager					X					
Steven Butts	Lab Technician						X				X
Charles Amaral	Maintenance Foreman				X				X		
Garry Murrill	Operator				X				X		
Cristian Ryan	Operator			X							
Yuri Fernandes	Operator				X						
Fred Anzivino	Operator										
Shaun Chaponis (Part Time Weekends)	Operator				X			X			

3 FLOWS AND LOADINGS:

3.0 FLOWS, PRECIPITATION, AND WEATHER

- The facility treated a total of **50.105** MG during the month. The daily average flow was **1.616** MGD. This was **0.408** MGD less than the previous August monthly average, which was recorded at **2.024** MGD. The highest daily flow was recorded on the August 10th as **2.02** MGD. The lowest daily flow was recorded on August 21st as **1.01** MGD.
- The highest **peak** flow was recorded on August 4th as **4.22** MGD.
- A total of **4.54"** of precipitation was received at the facility. The highest single day precipitation total was recorded on August 4th as **1.9"**
- The coldest day was August 30th at **49°F**. The warmest day was August 2nd at **93°F**.



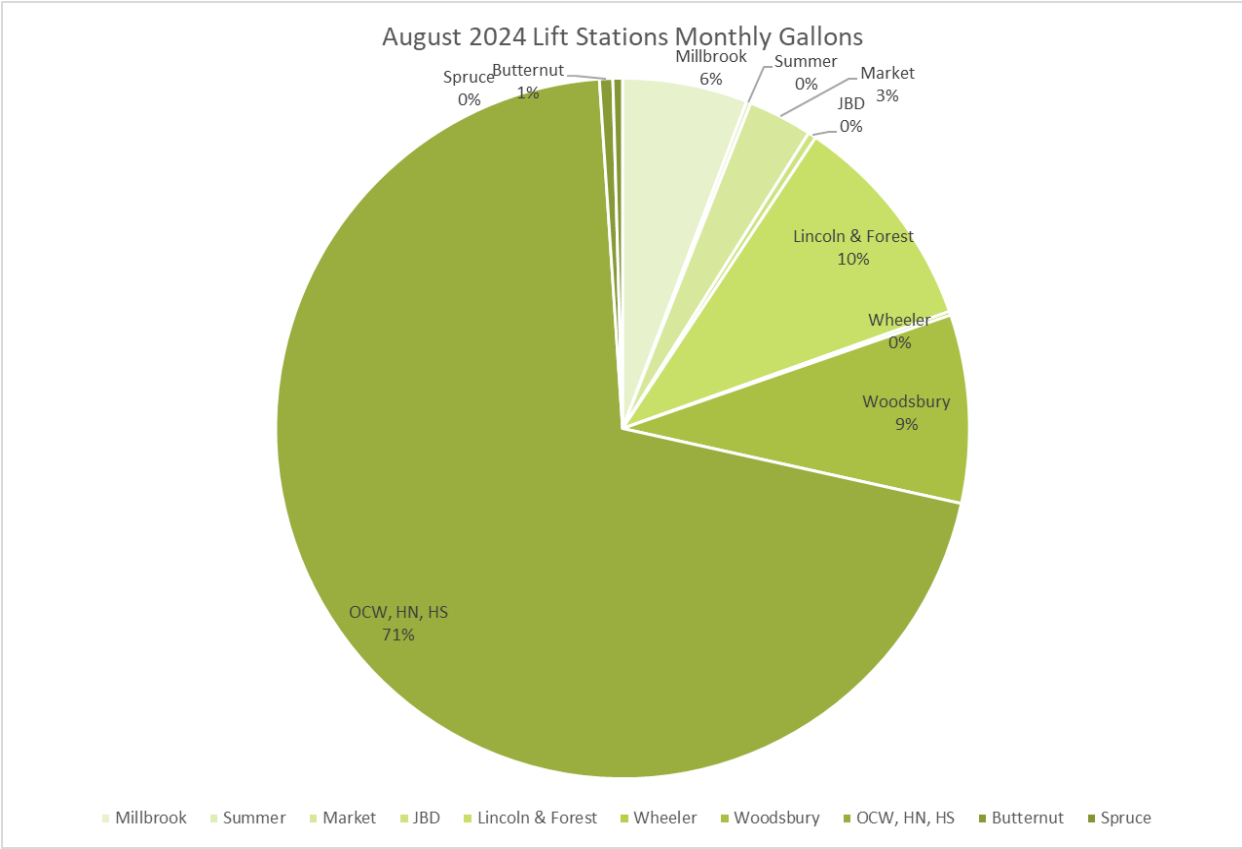
3.1 INFLUENT BOD AND TSS LOADING

ROCKLAND FLOW AND LOADINGS TRACKING				
Month/Yr	Influent Flow	Effluent Flow	Influent Flow Moving Avg.	Effluent Flow Moving Avg.
	MGD	MGD	MGD	MGD
Sep'23	2.457	2.532	2.760	2.374
Oct'23	2.114	2.161	2.730	2.351
Nov'23	2.069	2.069	2.711	2.323
Dec'23	3.302	2.790	2.702	2.365
Jan '24	4.110	3.477	2.689	2.458
Feb '24	2.884	2.905	2.684	2.479
Mar '24	4.212	3.836	2.735	2.499
Apr '24	3.886	3.534	2.843	2.609
May '24	2.899	2.614	2.877	2.646
June '24	2.317	2.034	2.896	2.671
July '24	1.723	1.461	2.839	2.62
Aug '24	1.723	1.735	2.610	2.473

3.2 LIFT STATION FLOWS

The lift stations accounted for **7,814,160** gallons throughout the month, **15.6%** of the total plant flow. Please note that monthly lift station flow totals are purely estimates based off of pump run hours and estimated flow rates. Values are not intended to in any way be used as design capacity volumes for potential future rehab / replacement projects.

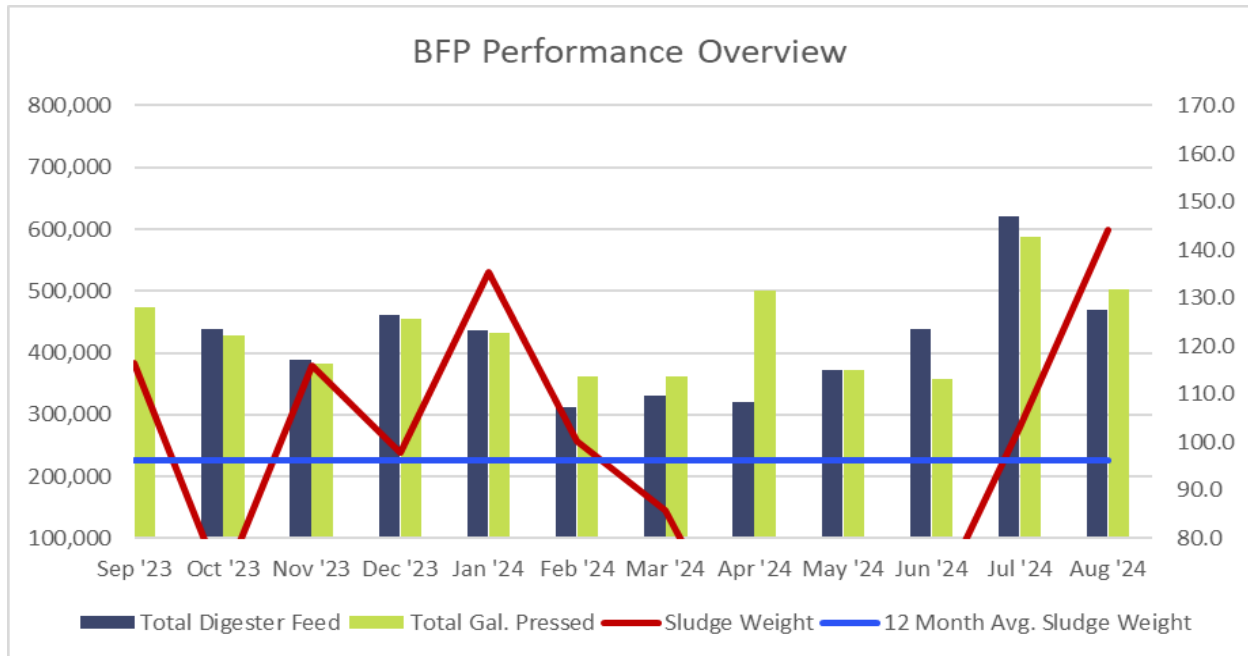
Total Flows for August 2024		
Station	Total Gallons	
Millbrook	830,520	
Summer	26,160	
Market	417,000	
John Burke	58,560	
Lincoln, Forest	1,346,100	
Wheeler	86,220	
Woodsbury	1,087,200	
OCW, HN, HS	4,698,000	
Butternut	79,200	
Spruce	54,000	
Total:	13,928,460	



Lift Station Monthly Average Daily Flows (GPD)													
Month	Millbrook	Summer	Market	John Burke	Lincoln	Forrest	Wheeler	Woodsbury	Old Country Way	Hingham North	Hingham South	Butternut	Spruce
	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD
Sep '23	30,356	857	13,554	1,637	2,679	51,300	765	45,321	52,650	153,900	166,628	2,379	
Oct '23	36,720	866	14,250	1,843	2,550	50,850	784	57,343	50,325	145,414	156,986	2,025	
Nov '23	30,047	857	13,286	3,137	2,743	58,050	1,080	36,450	46,650	130,757	145,414	2,539	
Dec '23	35,833	969	14,411	2,237	2,936	59,250	791	50,079	57,300	153,128	189,000	3,536	
Jan'24	36,373	1,123	18,643	2,246	3,836	62,700	849	66,793	82,050	174,729	242,614	5,271	
Feb'24	32,207	909	14,946	2,949	3,536	51,000	797	47,700	56,475	148,693	177,043	4,243	
Mar'24	43,470	1,320	14,411	3,317	7,500	58,200	1,061	61,714	77,625	193,436	246,471	5,529	
Apr'24	31,912	1,099	15,290	3,066	2,787	52,568	842	58,355	78,852	184,994	236,903	5,632	
May'24	33,062	952	14,419	2,245	2,768	53,042	854	47,787	53,381	159,735	204,503	3,339	3,629
June'24	27,941	883	12,968	2,036	2,516	47,894	830	40,877	47,352	137,334	173,148	2,700	2,468
July'24	26,791	844	13,452	1,889	2,439	43,423	2,781	35,071	35,429	133,084	151,548	2,555	1,742
Aug'24	26,094	921	13,403	1,703	2,884	42,745	784	38,961	36,987	130,297	148,761	2,787	2,003
Average GPD	32,567	967	14,419	2,359	3,265	52,585	1,018	48,871	56,256	153,792	186,585	3,545	2,461

4.0 SOLIDS HANDLING

The BFP was operated a total of **172.80** hours this month and a total of **503,173** gallons were processed producing **144.24** Wet Tons of sludge that was hauled from the facility. The average BFP feed percent solids were **1.84%** and the BFP Cake average percent solids were **23.44%**. The sludge processing Dry Tons conversion sheet is attached to this report.



Date	BFP Run Hours	Total Digester Feed	Total BFP Feed	Polymer Used	Actual Sludge Weight	Average Press Feed Total Solids	Average Cake Total Solids	Sludge Pick Up	Grit Removed
Sep '23	142.7	400,268	473,224	113.6	116.4	1.92	22.35	6.00	
Oct '23	127.4	438,575	428,509	112.0	70.5	2.00	22.64	5.00	
Nov '23	132.4	389,377	381,901	108.8	116.0	2.18	22.12	8.00	
Dec '23	150.5	460,829	454,170	137.6	97.9	2.04	21.95	6.00	
Jan '24	152.4	436,721	432,214	123.2	135.3	2.27	20.80	7.00	
Feb '24	130.5	311,234	362,674	111.2	100.1	2.05	22.41	6.00	
Mar '24	122.3	331,384	362,712	119.2	85.7	2.32	21.64	6.00	
Apr '24	164.0	321,384	500,524	131.2	50.9	1.69	21.51	6.00	
May '24	131.0	371,436	373,008	108.0	68.4	1.81	20.97	5.00	5.00
Jun '24	114.9	438,919	357,639	99.4	64.8	1.80	21.50	5.00	
Jul '24	183.5	620,475	587,962	157.5	103.2	2.06	21.84	8.00	
Aug '24	172.8	449,021	503,173	132.0	144.2	1.84	23.44	7.00	
Annual Total	1,724	4,969,623	5,217,710	1,454	1,153	*****	*****	75	5.00
Avg.	144	414,135	434,809	121	96	2.00	21.93	6.3	*****

5.0 ENVIRONMENTAL COMPLIANCE

5.1 REGULATORY REPORTING

1. The EPA and MADEP May NETDMR was submitted on the CDX website on September 15th, 2024

5.2 NPDES COMPLIANCE

The facility will be reporting (0) exceedance(s) for the month of August 2024

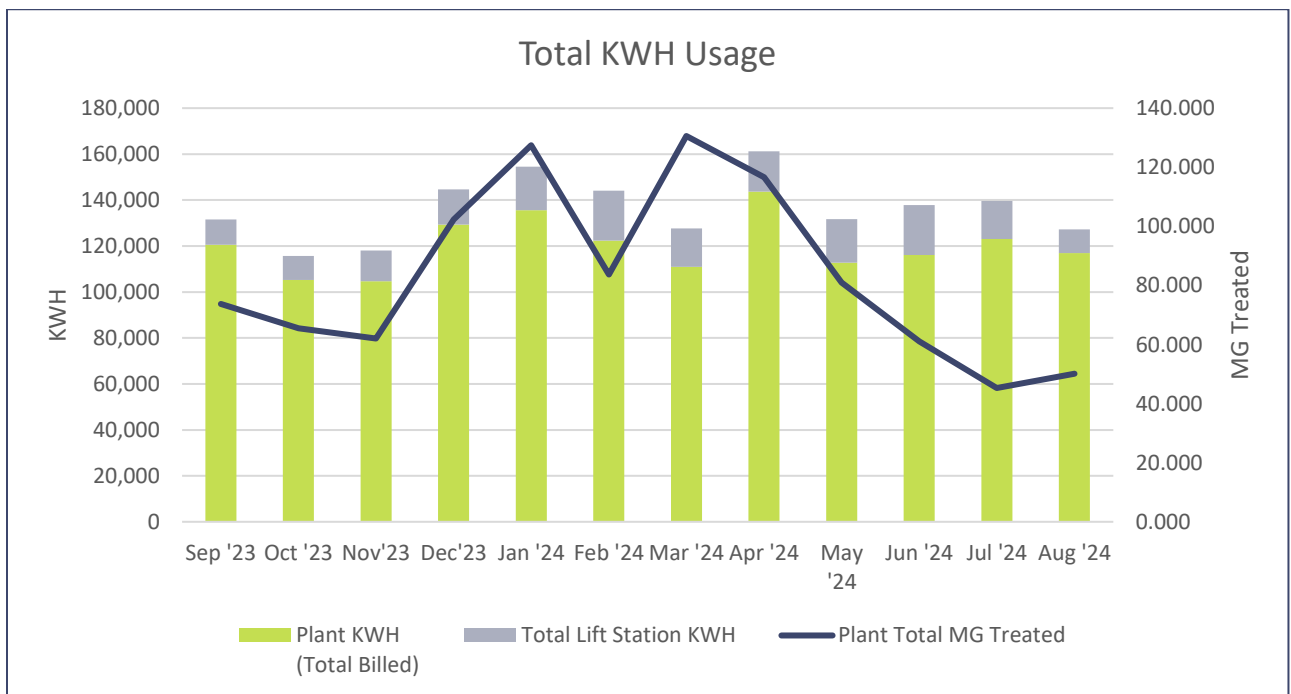
Date	BFP Run Hours	Total Digester Feed	Total BFP Feed	Polymer Used	Actual Sludge Weight	Average Press Feed Total Solids	Average Cake Total Solids	Sludge Pick Up		Grit Removed
Sep '23	142.7	400,268	473,224	113.6	116.0	1.92	22.35	6.00		
Oct '23	127.4	438,575	428,509	112.0	71.0	2.00	22.64	5.00		
Nov '23	132.4	309,377	301,901	108.0	116.0	2.10	22.12	8.00		
Dec '23	150.5	460,829	454,170	137.6	98.0	2.04	21.95	6.00		
Jan '24	152.4	436,721	432,214	123.2	135.0	2.27	20.80	7.00		
Feb '24	130.5	311,234	362,674	111.2	100.0	2.05	22.41	6.00		
Mar '24	122.3	331,304	362,712	119.2	86.0	2.32	21.64	6.00		
Apr '24	164.0	321,384	500,524	131.2	51.0	1.69	21.51	6.00		
May '24	131.0	371,436	373,008	108.0	66.0	1.81	20.97	5.00		5.00
Jun '24	114.9	438,919	357,639	99.4	49.0	1.80	21.50	5.00		
Jul '24	114.9	620,475	507,962	157.5	131.0	2.06	21.84	8.00		
Aug '24	172.8	469,021	503,173	132.0	144.0	2.01	23.42	7.00		
Annual Tot	1,656	4,989,623	5,217,710	1,454	1,163	24.15	263.15	75		5.00
Avg.	138	415,802	434,809	121	97	2.01	21.93	6.3		*****

6.0 ENERGY CONSUMPTION

6.1 ELECTRICAL OVERVIEW

The department used a total of **127,240 KWH** for the month of August 2024. Of this total, the lift stations accounted for **9.6%**, using **10,240 KWH**. The Main Plant accounted for the remaining **127,240 KWH**. The KWH/ MG treated was **2,335** for the month, which is **9%** lower than the previous 12-month average of **1,671 KWH/MG**. The KWH/Lb. BOD Removed was **0.95 KWH/Lb.** for the month, which is **7%** lower than the previous 12-month average of **1.06 KWH/Lb.**

Monthly Energy Consumption										
Month	Plant Average Daily Flow (NO HFMP)	Plant Total Influent Flow	Plant KWH (Total Billed)	KWH/MG Treated (Plant)	Plant Lbs BOD Removed	KWH/Lb BOD Removed (Plant)	Off Peak Demand (Plant)	Peak Demand (Plant)	Total Lift Station KWH	Total KWH (Plant & Stations)
	MGD	MG	KWH	KWH/MG	Lbs	KWH/Lb	KW	KW	KWH	KWH
Sep '23	2.53	75.95	120,600	1,588	134,488	0.9	192	201	10,893	131,493
Oct '23	2.16	67.00	105,300	1,572	134,616	0.78	195	213	10,331	115,631
Nov'23	2.07	62.06	104,700	1,687	43,777	2.39	195	201	13,297	117,997
Dec'23	2.79	86.49	129,300	1,495	66,318	1.95	207	234	15,313	144,613
Jan'24	3.18	98.54	135,600	1,376	48,027	2.82	261	273	18,956	154,556
Feb'24	2.90	84.23	122,400	1,453	122,094	1.00	213	231	21,708	144,108
Mar'24	3.58	110.89	111,000	1,001	128,077	0.87	222	216	16,633	127,633
Apr'24	3.40	101.85	143,700	1,411	158,901	0.90	228	237	17,451	161,151
May'24	2.61	81.03	112,800	1,392	155,428	0.73	210	219	18,956	131,756
Jun'24	2.03	61.01	116,100	1,903	151,206	0.77	186	222	21,708	137,808
Jul'24	1.46	45.28	123,000	2,716	137,028	0.90	186	195	16,633	139,633
Aug'24	1.62	50.11	117,000	2,335	123,371	0.95	195	189	10,240	127,240
Average	2.53	77.04	120,125	1,661	116,944	1.25	208	219	16,010	136,135



7.0 MAINTENANCE

7.1 WORK ORDER OVERVIEW

WO Type	Total This Month	Total This Year
Preventative Maintenance	128	1000
Corrective Maintenance	17	81
Emergency Call Outs Total	13	29

7.2 EMERGENCY CALL OUTS FOR THE MONTH

Type	Total this Month	Total this Year
Sewer Back Up / Collection System	0	8
Pump Station	10	12
Plant	1	9
Odor	0	0
Power Outages	13	1
Total:	24	30

7.3 INSPECTIONS / ANNUAL PMS COMPLETED DURING THE MONTH

1. All pump station alarms checked
2. Eye wash inspections completed weekly
3. Fire extinguisher inspections completed monthly

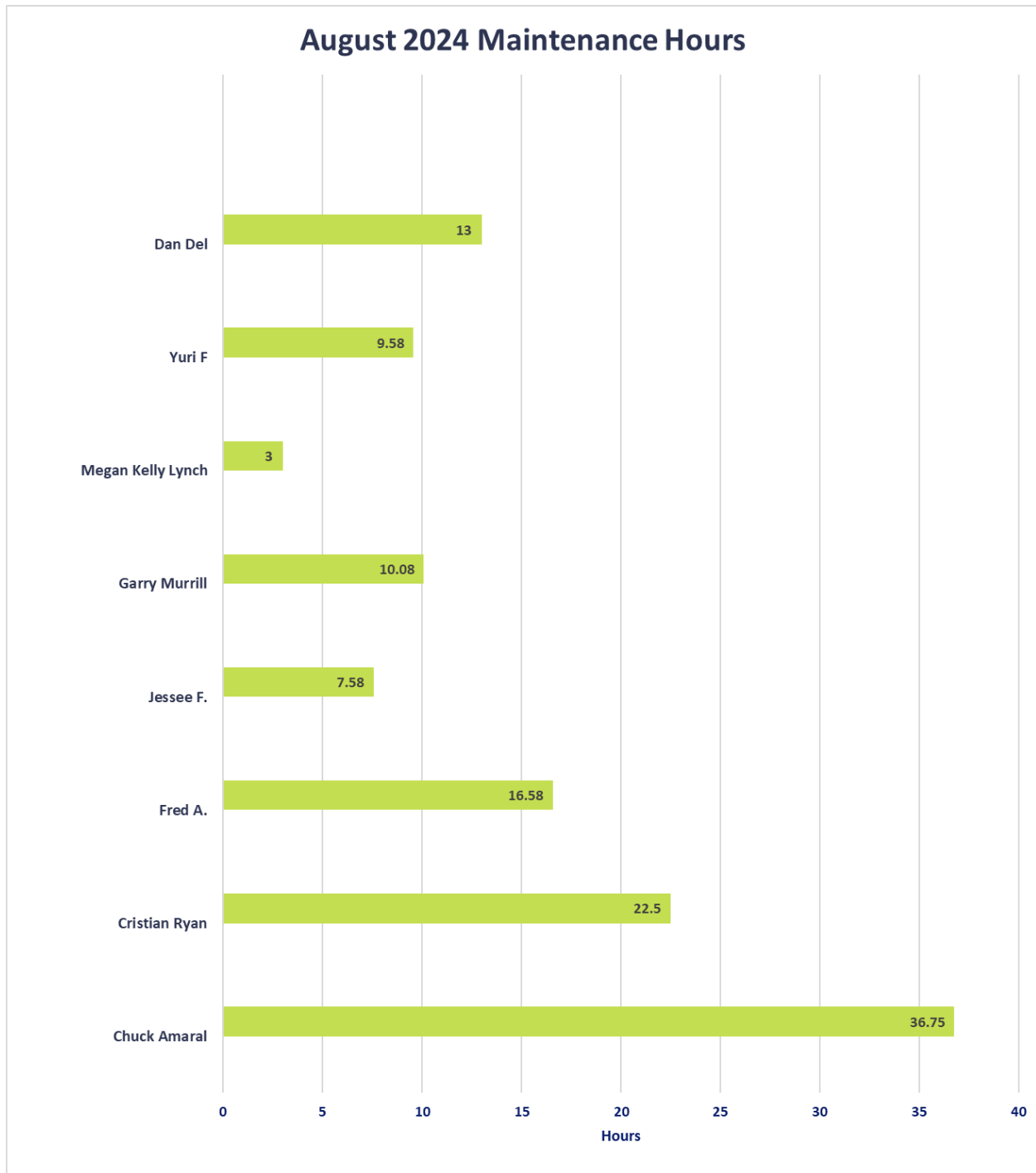
7.4 COLLECTION SYSTEM AND IPP ASSISTANCE PERFORMED BY VEOLIA

COLLECTION SYSTEM ASSISTANCE:

Type	Total This Month	Total This Year
Sewer Inspection / Tie-Ins	2	0
Sewer Location mark Outs	43	541
Sewer Back Up	0	5

7.5 WORK ORDER STATISTICS

There were **119** total reported maintenance hours during the month. Of this total, outside contractors accounted for 11% with **13** hours recorded.



8.0 FINANCIAL ACCOUNTING- REPAIR / MAINTENANCE (JULY '24 – JUNE '25)

Item	Budget	Spent Month	Spent Year	Remaining
R & M (Project)	\$100,000.00	\$10,787.87	\$22,453.67	\$77,546.33

8.1 SIGNIFICANT R&M PURCHASES

1. Purchased a new Hingham North Station Pump from F.W Wedd Company for \$2,869.41
2. Dependable Petroluem repaired containment sump pump for under ground storage tanks for \$3,442.50
3. Purchased Effluent pH probe from USA Bluebook for \$1,113.76
4. Purchased Lime hoses and couplings from NIR Sales for \$1,113.76

9.0 ATTACHED REPORTS

- Discharge Monitoring Report
- HACH Wims Data Reports
- Financial Reports