



Monthly Operating Report

DECEMBER 2024



Rockland, MA WWTP



TOWN OF
ROCKLAND
MASSACHUSETTS

MOR December 2024

January 15, 2024

Mr. David Taylor

Rockland Sewer Superintendent Interim

587 Rear Summer Street

Rockland, MA 02370



RE: Rockland Wastewater Facility

Monthly Report—December 2024

Dear Representative of Rockland Sewer Affairs,

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

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

Sincerely,

Megan Lynch
Veolia Project Manager

Jesse Freeman
Veolia Assistant Project Manager

CC: Rockland Sewer Commissioners

Micheal Mullen

Walter Simmons

Mathew Ryan



1. SUMMARY:

1. The facility will be reporting **0** exceedance for the month of December 2024
2. There was **0** lost time / first aid injuries throughout the month.
3. The facility treated a total of **75.152** million gallons. The average daily flow was **2.424**
4. The total rainfall for this reporting period was **6.22"**
5. I&I Work is ongoing
6. **196** work orders were closed out, with **12** as corrective maintenance work orders 4 emergency call outs.
7. Massachusetts general wastewater permit began April 1st, 2023

2. STAFFING:

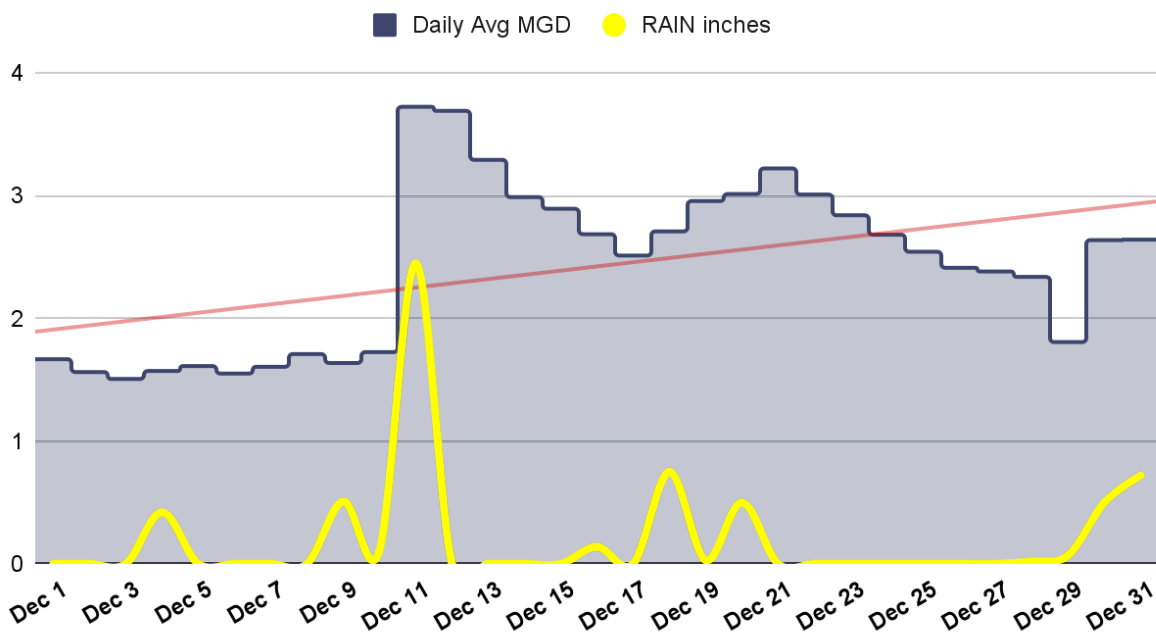
Current Employee Licenses as of 11/31/2024											
		Hoisting		Wastewater				NEWEA Collections			NEWEA Lab
Employee	Title	1C Forklift	1B Boom Truck & Forklift	3M	5C	6C	7C	I	II	IV	I
Megan Lynch	Project Manager	X	X				X			X	
Jesse Freeman	Asst. Project Manager					X					
Charles Amaral	Maint Foreman				X				X		
Garry Murrill	Operator				X				X		
Yuir Fernandes	Operator				X						
Cristian Ryan	Operator			X	X						
Camden Ryan	OIT										
Fred Anzivino	OIT										
Shaun Chaponis	Operator				X			X			



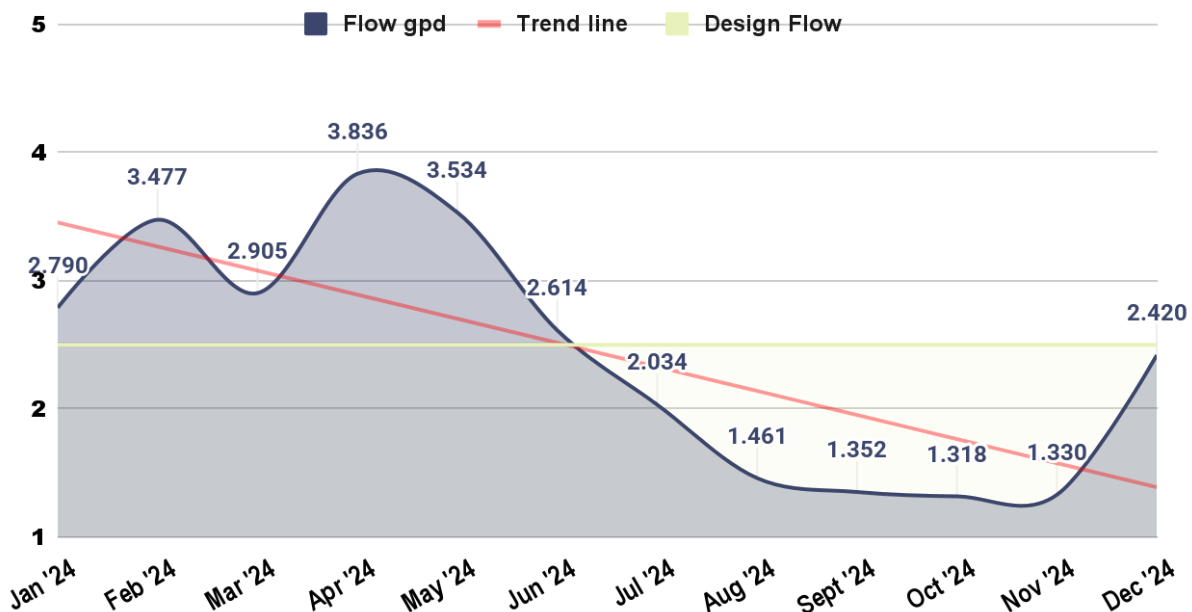
3. FLOWS AND LOADINGS:

- The facility treated a total of **75.152 MG** during the month. The daily average flow was **2.424 MGD**. This was **.336 MGD** LESS than the previous December monthly average 2023, which was recorded at **2.790 MGD** (2023). The highest daily flow was recorded on December 11th as **3.725 MGD**.
- The lowest daily flow was recorded on December 3rd, as **1.507 MGD**.
- The highest **peak** flow was recorded on December 12th, as **5.45 MGD**.
- A total of **6.22"** of precipitation was received at the facility. The highest single day precipitation total was recorded on December 11th, as **2.45"**.
- The coldest day was 22nd as , **6 F**. The warmest day was 11th as , **62 F**.

Flow and Rain



Average MGD Rolling Annual





3.1 INFLUENT **BOD** AND **TSS** LOADING

Month Year	INF	EFF	INF FLOW	EFF FLOW	INF	INF	INF BOD	INF TSS
	Inf FLOW	Eff FLOW	In MOV AVG	eff MOV AVG	in BOD	in TSS	MOV AVG	MOV AVG
	MGD	MGD	MGD	MGD	LBS	LBS	LBS	LBS
Jan '24	4.110	3.477	2.689	2.458	4,390	2,943	4,385	3,141
Feb '24	2.884	2.905	2.684	2.479	4,415	3,673	4,469	3,199
Mar '24	4.212	3.836	2.735	2.499	4,312	3,098	4,533	3,187
Apr '24	3.886	3.534	2.843	2.609	5,490	3,789	4,616	3,220
May '24	2.899	2.614	2.877	2.646	5,118	3,910	4,629	3,296
Jun '24	2.317	2.034	2.896	2.671	5,100	5,453	4,629	3,488
Jul '24	1.723	1.461	2.839	2.620	4,463	3,979	4,627	3,519
Aug '24	1.824	1.616	2.816	2.586	4,014	5,460	4,573	3,692
Sept '24	1.568	1.352	2.742	2.487	4,820	4,124	4,595	3,791
Oct '24	1.485	1.318	2.690	2.417	3,458	4,100	4,514	3,871
Nov '24	1.541	1.330	2.646	2.356	3,982	2,677	4,520	3,891
Dec '24	2.597	2.424	2.562	2.325	5,602	3,982	4,468	3,932

Please note : eff MOV AVG is a 12 month moving average. The reported rate is Eff Flow.

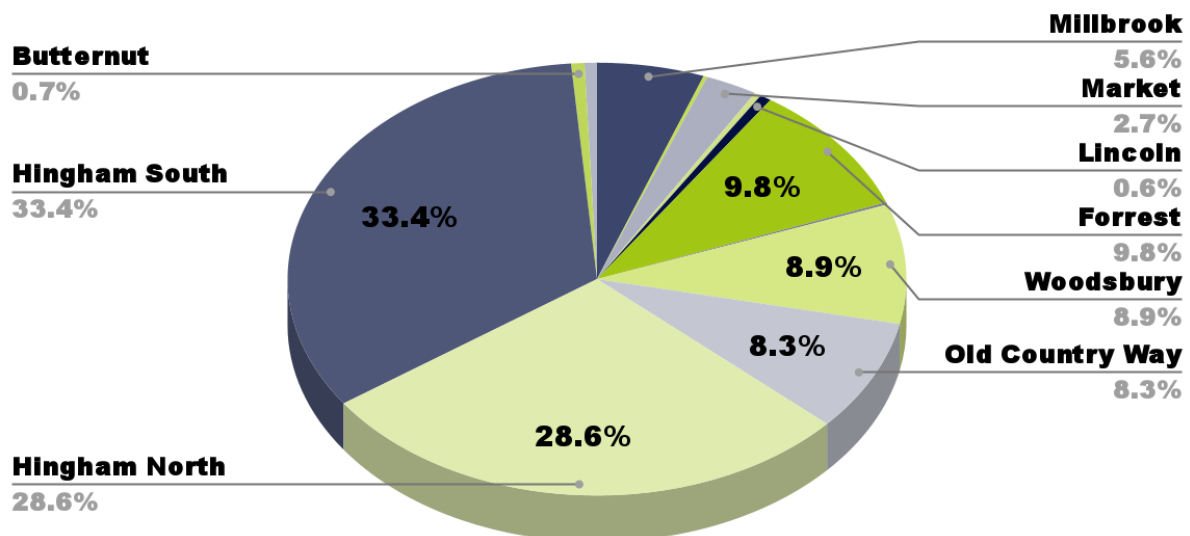
3.2 LIFT STATION FLOWS

The lift stations accounted for **16.305 million gallons** throughout the month, **22%** 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.



Lift Station Monthly Average Daily Flows (GPD)										
Month	Millbrook	Market	John Burke	Lincoln	Forrest	Wheeler	Old Country	Hingham N	Hingham S	Butternut
	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD
Jan'24	36,373	18,643	2,246	3,836	62,700	849	82,050	174,729	242,614	5,271
Feb'24	32,207	14,946	2,949	3,536	51,000	797	56,475	148,693	177,043	4,243
Mar'24	43,470	14,411	3,317	7,500	58,200	1,061	77,625	193,436	246,471	5,529
Apr'24	31,912	15,290	3,066	2,787	52,568	842	78,852	184,994	236,903	5,632
May'24	33,062	14,419	2,245	2,768	53,042	854	53,381	159,735	204,503	3,339
June'24	27,941	12,968	2,036	2,516	47,894	830	47,352	137,334	173,148	2,700
July'24	26,791	13,452	1,889	2,439	43,423	2,781	35,429	133,084	151,548	2,555
Aug'24	26,094	13,403	1,703	2,884	42,745	784	36,987	130,297	148,761	2,787
Sep'24	23,342	11,903	1,603	2,535	42,406	772	33,329	120,890	139,355	1,684
Oct'24	30,554	12,677	1,804	2,613	48,165	790	36,716	129,252	143,884	2,148
Nov'24	30,170	13,306	2,385	2,826	46,268	813	35,023	130,035	141,445	2,468
Dec'24	30,449	14,782	1,916	3,232	53,042	877	45,319	155,433	181,510	3,774
Avg GPD	31,479	14,152	2,290	3,265	50,638	997	52,543	149,634	182,890	3,491

Pump Stations 2024





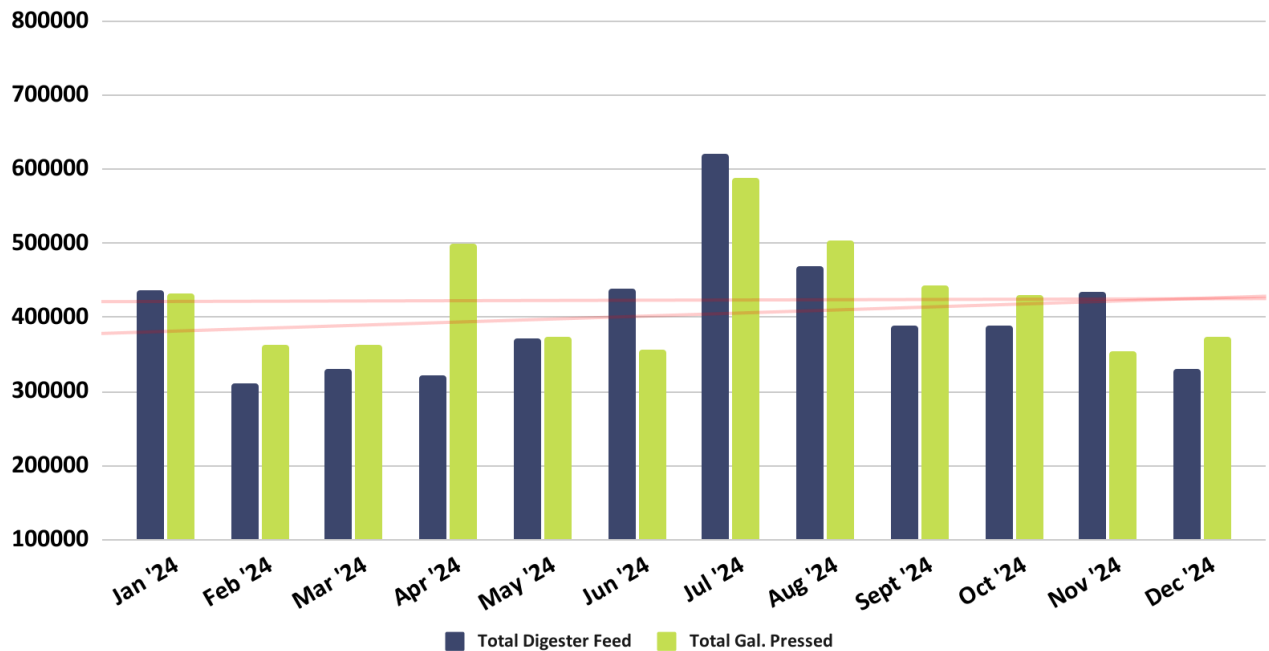
4.0 SOLIDS HANDLING

The BFP operated a total of **138** hours this month and a total of **373,421** gallons were processed producing **66** Wet Tons of sludge that was hauled from the facility. The average BFP feed percent solids were **1.5 %** and the BFP Cake average percent solids were **21.5 %**.

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
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	331,384	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	
Jun '24	114.9	438,919	357,639	99.4	49.0	1.80	21.50	5.00	
Jul '24	114.9	620,475	587,962	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	
Sept '24	156.7	388,696	442,447	124.8	58.0	1.37	24.78	5.00	
Oct '24	165.9	474,833	431,295	122.8	111.0	1.71	23.46	7.00	
Nov '24	137.7	434,469	355,009	98.0	80.0	2.00	23.00	4.00	
Dec '24	138.2	331,535	373,421	115.0	66.0	1.47	21.30	4.00	
Rolling Total	1,701	4,930,107	5,082,078	1,442	1,077	22.56	266.63	70	0.00
Avg.	142	410,842	423,507	120	90	1.88	22.22	5.8	*****



BFP Performance Overview



5.0 ENVIRONMENTAL COMPLIANCE

5.1 REGULATORY REPORTING

1. The EPA and MADEP December NETDMR was submitted on the CDX website in January 2025.

5.2 NPDES COMPLIANCE

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



Date	Plant Flow	BOD	BOD	TSS	TSS	NH3	Total P	Ph	E. Coli Coliform	Dissolved Oxygen
	MGD	Mg/L	Lbs./Day	Mg/L	Lbs./Day	Mg/L	Mg/L	Ph	CFU/100 ml	Mg/L
1	1.67							7.47		>8
2	1.56							7.45		>8
3	1.51							7.58	328	>8
4	1.57	4.0	52	5.0	66	0.10	0.22	7.57	62	>8
5	1.61							7.55		>8
6	1.55							7.50		>8
7	1.61							7.45		>8
8	1.71							7.20		>8
9	1.64							7.02		>8
10	1.73							7.42	10	>8
11	3.73	6.0	186	11.0	342			7.43		>8
12	3.69							7.40		>8
13	3.29							7.35		>8
14	2.99							7.33		>8
15	2.89							7.21		>8
16	2.69							7.30		>8
17	2.51							7.27	37	>8
18	2.71	6.0	136	13.0	294	0.30	0.24	7.27		>8
19	2.96							7.32		>8
20	3.01							7.38		>8
21	3.22							7.30		>8
22	3.01							7.25		>8
23	2.84							7.25		>8
24	2.68							7.40		>8
25	2.54	2.0	42	11.0	233			7.37		>8
26	2.41							7.44		>8
27	2.38							7.40	39	>8
28	2.34							7.38		>8
29	1.81							7.39		

Effluent copper : 5 micrograms. // Aluminum : 3 micrograms. Total Nitrogen <15 ppm avg.

Total BOD & TSS Removal : at 98.6 %



6.1 ELECTRICAL OVERVIEW

The department used a total of **145,276 KWH** for the month of December 2024. Of this total, the lift stations accounted for **13 %**, using **18 '376 KWH**. The Main Plant accounted for the remaining **126,900 KWH**. The KWH/ MG treated was **1,689** for the month and the KWH/Lb. BOD Removed was **1.01 KWH/Lb.** for the month.

Monthly Energy Consumption										
Month	Plant Average Daily Flow (NO HFMP)	Plant Total Effluent 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
Jan '24	3.477	98.5	135,600	1,588	48,027	0.9	261	273	18,956	144,613
Feb '24	2.905	84.20	122,400	1,572	122,094	0.78	213	231	21,708	154,556
Mar '24	3.836	110.90	111,000	1,687	128,077	2.39	222	216	16,633	144,108
Apr '24	3.534	101.9	143,700	1,495	158,901	1.95	228	237	17,451	127,633
May '24	2.614	81.00	112,800	1,376	155,428	2.82	210	219	16,066	161,151
Jun '24	2.034	61.00	116,100	1,453	151,206	1.00	186	222	12,509	128,866
Jul '24	1.461	45.30	123,000	1,001	137,028	0.87	186	195	10,930	133,930
Aug '24	1.616	50.10	111,300	2,222	124,000	0.89	171	176	10,240	121,540
Sept'24	1.352	40.55	100,500	2,722	120'000	0.92	171	186	9,901	110,401
Oct'24	1.318	40.86	103,500	2,937	116,402	1.03	205	217	18,305	138,305
Nov '24	1.330	39.89	123,600	3,098	115,803	1.07	171	177	15,694	139,294
Dec '24	2.420	75.15	126,900	1,689	125,700	1.01	228	222	18,376	145,276
Average	2.32	69.11	119,200	1,903	125,697	1.30	204	214	15,564	137,473



Please note an error was found in the counts sec 7, the numbers for FY25 are now accurate and revised.

7.0 MAINTENANCE

7.1 WORK ORDER OVERVIEW

WO Type	Total This Month	Total This Year
Preventative Maintenance	184	996
Corrective Maintenance	12	103
Emergency Call Outs Total	4	29

7.2 EMERGENCY CALL OUTS FOR THE MONTH

Type	Total this Month	Total this Year
Sewer Back Up / Collections	1	3
Pump Station	0	13
Plant	2	9
Odor	0	0
Power Outages	1	16

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:

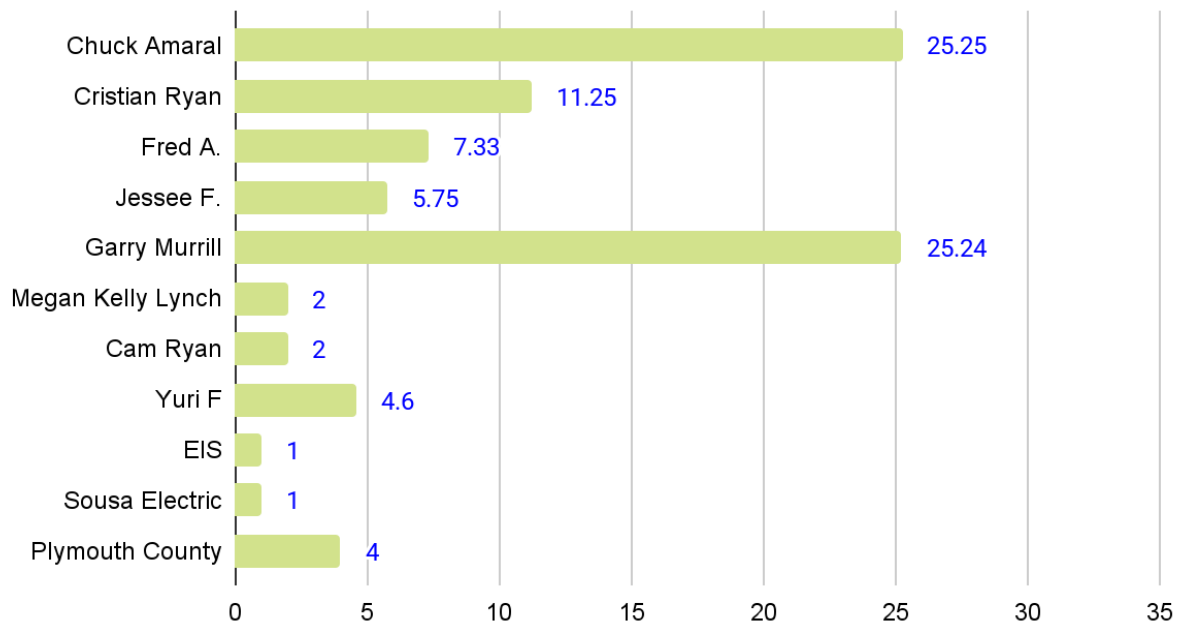
Type	Total This Month	Total This Year
Sewer Inspection / Tie-Ins	3	6
Sewer Location mark Outs	52	338
Sewer Backup	0	4

7.5 WORK ORDER STATISTICS



There were 184 total reported maintenance hours during the month. Of this total, outside contractors accounted for 6 % with 12 hours recorded.

Work Orders 2024



8.0 FINANCIAL ACCOUNTING- REPAIR / MAINTENANCE ()

8.1 SIGNIFICANT R&M PURCHASES

12/03/24	ESI - Wired new generator "RUN" signal in the plant SCADA system
12/04/24	Plymouth County Fire Extinguisher Service, Inc - Annual service inspection of all fire extinguishers
12/05/24	Amazon - dielectric grease for the left hand limit switch on BFP
12/09/24	FM Generator - Annual inspection at Forest St
12/09/24	FM Generator - Annual Inspection at Market St.
12/09/24	FM Generator - Annual Inspection at Woodsbury
12/09/24	FM Generator - Annual Inspection at Millbrook
12/09/24	FM Generator - Annual Inspection at Old Country Way



12/09/24 FM Generator - Annual Inspection at Hingham South
12/09/24 FM Generator - Annual Inspection at Hingham North
12/11/24 Home Depot - Ice Melt and Extreme Weather Timer
12/11/24 Hoadley - Propane Cylinder for the Forklift
12/12/24 Rags - Rags for Maintenance

Item	Budget	Spent Month	Spent Year	Remaining
R & M (Project)	\$100,000.00	\$ 3,015	\$ 33,694	\$ 67,066

9.0 ATTACHED REPORTS

- Discharge Monitoring Report
- Data Reports
- Financial Reports