Monthly Operating Report

SEPTEMBER 2022



Rockland, MA WWTP





Mr. Chuck Heshion
Rockland Sewer Commission Chairman
587 Rear Summer Street
Rockland, MA 02370
RE: Rockland Wastewater Facility
Monthly Report—September 2022
Dear Mr. Heshion,
I have enclosed September's 2022 Monthly Operating Report (MOR) for the Veolia Operations and Maintenance contract.
Please contact me soon as possible should you have any questions regarding this report.
Sincerely,
Rick Kotouch
Veolia Project Manager
CC:
Daniel Duross
Sherri Vallie

SEPTEMBER 2022 MONTHLY OPERATING REPORT

1. SUMMARY:

- 1) The facility will be reporting **0** exceedance for the month of September 2022
- 2) There was **0** lost time / first aid injuries throughout the month
- 3) The facility treated a total of 54.230 Million Gallons. The average daily flow was 1.808 MGD
- 4) The total rainfall for this reporting period was 4.07"
- 5) I&I Work is ongoing
- 6) 175 work orders were closed in August, with 6 as corrective maintenance work order and 2 were emergency call outs
- 7) The new NPDES Permit was issued in November 2021 and became effective in February 2022

2. STAFFING:

		Curre	ent Employe	ee Licens	es as of (08/31/20	22			
_		Hoisting		Wastewater			NEV	NEWEA Laboratory		
Employee	Title	1C Forklift	1B Boom Truck & Forklift	3M	5C	7C	1	П	IV	I
Richard Kotouch	Project Manager					х			х	
Megan Kelly-Lynch	Asst. Project Manager	х				х				
Steven Butts	Lab Technician					×				х
Charles Amaral	Maintenance Foreman				х			х		
Garry Murrill	Operator				х			x		
Maxwell Jackson	Operator			х						
Cristian Ryan	Operator									
Shaun Chaponis (Part Time Weekends)	Operator				х		х			

3. EMPLOYEE HEALTH AND SAFETY:

The employee that slipped on black ice in the parking lot on 3/2/2022 and returned back to work on 3/21/22 is now working with no restrictions.

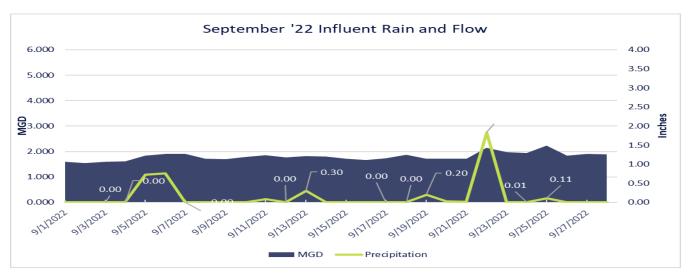
Throughout the COVID-19 (Coronavirus) pandemic in an attempt to continue to serve the Town of Rockland with reliable operations and protect the staff of the Rockland team, Veolia has implemented numerous procedures to ensure continuity of the operations. As the COVID-19 Delta variant and Omicron rates decrease, Veolia at the Rockland facility has downgraded to a Threat Level 0 guideline as follows:

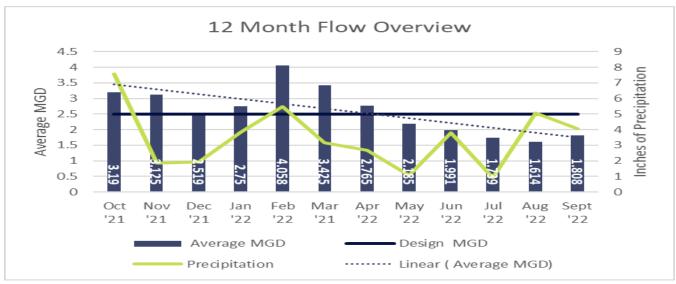
All essential personnel, contractor's and visitor's are screened before entering the premises if they have Covid like symptons or have been exposed to someone having Covid. Use of common areas/dining areas, in-person meetings and training are now permitted.

4 FLOWS AND LOADINGS:

4.0 FLOWS, PRECIPITATION, AND WEATHER

- The facility treated a total of 54.230 MG during the month. The daily average flow was 1.808 MGD. This was 1.239 MGD less than the previous September monthly average, which was recorded at 3.047 MGD. The highest daily flow was recorded on September 25th as 2.230 MGD. The lowest daily flow was recorded on September 2nd as 1.550 MGD.
- The highest *peak* flow was recorded on September 28th as **2.670** MGD. The lowest instantaneous flow was **0.640** MGD, recorded September 14th.
- A total of 4.07" of precipitation was received at the facility. The highest single day precipitation total was recorded on September as 1.83"
- The coldest day was September 30th at 43°F. The warmest day was September 4th at 86°F.





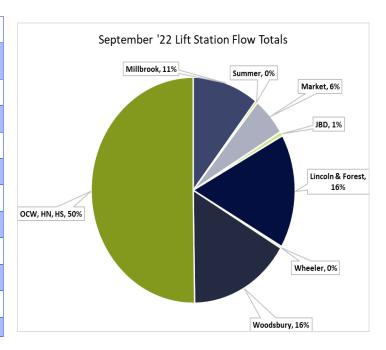
4.1 INFLUENT BOD AND TSS LOADING

	ROCKLAND FLOW AND LOADINGS TRACKING							
Month/Yr	Inf. Flow	Inf BOD	Inf. TSS	Inf. Flow Mov. Avg.	Inf. BOD Mov. Avg.	Inf. TSS Mov. Avg.		
	MGD	LBS	LBS	MGD	LBS	LBS		
Oct '21	3.19	2,990	3,889	2.936	3,046	3,815		
Nov '21	3.125	2,270	3,500	3.015	2,963	3,774		
Dec '21	2.519	3,597	3,699	2.938	3,019	3,738		
Jan '22	2.75	3,909	3,676	2.931	3,103	3,774		
Feb '22	4.058	3,910	3,913	2.993	3,158	3,755		
Mar '22	3.425	3,887	4,456	3.055	3,240	3,855		
Apr '22	2.765	3,907	4,051	3.024	3,299	3,891		
May '22	2.185	3,809	4,229	2.988	3,326	3,909		
Jun'22	1.991	4,343	4,006	2.952	3,365	3,975		
Jul'22	1.739	3,316	3,546	2.810	3,446	3,990		
Aug'22	1.614	3,313	3,758	2.702	3,469	3,969		
Sep'22	1.808	3,716	3,838	2.597	3,581	3,880		

4.2 LIFT STATION FLOWS

The lift stations accounted for **8,450,280** gallons throughout the month, **85%** 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.

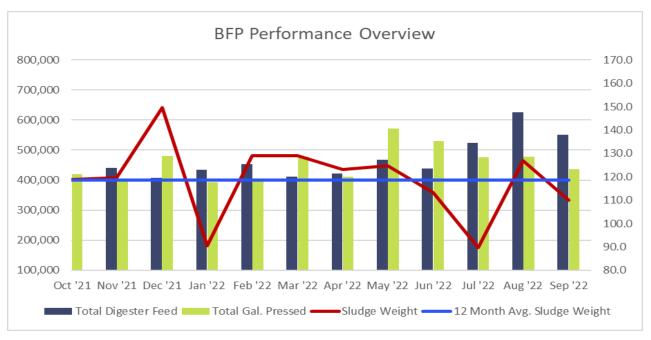
Total Flows	for September	2022
Station	Total Gallons	
Millbrook	888,840	
Summer	29,280	
Market	462,000	
Butternut	12,240	
John Burke	54,480	
Lincoln, Forest	1,379,700	
Wheeler	21,780	
Woodsbury	1,369,800	
OCW, HN, HS	4,244,400	
Total:	8,450,280	



	Lift Station Monthly Average Daily Flows (GPD)											
Month	Millbrook	Summer	Market	Butternut	John Burke	Lincoln	Forrest	Wheeler	Woodsbury	Old Country Way	Hingham North	Hingham South
	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD
Oct '21	27,975	1,223	14,318		1,644	2,110	36,581	586	32,865	51,755	73,335	273,484
Nov '21	33,156	920	16,150		2,456	2,600	42,980	834	46,620	57,960	151,920	172,800
Dec '21	31,459	929	15,677		1,881	3,232	42,339	703	49,355	59,206	157,994	182,555
Jan '22	31,738	937	15,677		2,655	2,400	39,155	726	45,348	53,110	144,540	155,380
Feb '22	33,156	920	16,150	Old Custom	2,456	2,600	42,980	834	46,620	57,960	151,920	172,800
Mar '22	31,459	929	15,677	Old System	1,881	3,232	42,339	703	49,355	59,206	157,994	182,555
Apr '22	33,156	920	16,150		2,456	2,600	42,980	834	46,620	57,960	151,920	172,800
May '22	31,738	937	15,677		2,655	2,400	39,155	726	45,348	53,110	142,142	155,380
Jun '22	33,073	994	15,640		1,872	2,520	41,300	828	45,060	53,900	144,540	159,480
Jul '22	27,975	1,223	14,318		1,644	2,110	36,581	586	32,865	51,755	73,335	273,484
Aug '22	31,459	1,076	15,581	695	2,145	2,439	40,442	703	38,265	44,100	134,843	113,574
Sep '22	29,628	976	15,400	408	1,816	2,380	45,990	732	45,660	42,350	134,460	141,480
Average	31,331	999	15,535		2,130	2,552	41,068	733	43,665	53,531	134,912	179,648

5.0 SOLIDS HANDLING6.1 REGULATORY REPORTING

The BFP was operated a total of **140.60** hours this month and a total of **436,908** gallons were processed producing **110** Wet Tons of sludge that was hauled from the facility. The average BFP feed percent solids were **2.46%** and the BFP Cake average percent solids were **24.43%**. The sludge processing Dry Tons conversion sheet is attached to this report.



Date+AA23: K46	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
	HRS	Gal.	Gal.	Gal.	Wet Tons	%	%	Dumpster	Tons
Oct '21	108.5	515,074	420,101	86.6	118.9	2.67	21.17	5.00	
Nov '21	120.0	439,762	398,853	90.4	119.8	2.25	20.40	7.00	
Dec '21	152.8	407,825	481,140	126.2	149.5	1.56	20.29	7.00	
Jan '22	141.3	433,648	392,237	101.8	90.5	1.86	18.19	6.00	
Feb '22	140.8	453,426	396,361	112.0	128.9	2.07	18.64	6.00	
Mar '22	533.0	412,533	477,919	136.1	128.9	1.79	18.32	7.00	
Apr '22	133.8	422,314	410,793	123.4	123.0	2.66	19.69	6.00	
May '22	174.3	468,083	571,658	154.1	124.7	1.89	21.14	8.00	
June '22	151.3	439,371	530,756	132.9	113.3	2.26	21.92	6.00	
July '22	137.5	524,233	475,614	119.6	89.8	2.04	22.05	5.00	
Aug '22	152.6	626,023	477,850	132.8	126.8	2.15	23.45	7.00	
Sep '22	140.6	550,718	436,908	118.4	110.0	2.46	24.43	7.00	
Annual Total	2,086	5,693,010	5,470,190	1,434	1,424	****	****	77	0.00
Avg.	174	474,418	455,849	120	119	2.14	20.81	6.4	****

6.0 ENVIRONMENTAL COMPLIANCE

6.1 REGULATORY REPORTING

- 1. The EPA and MADEP September 22 NETDMR was submitted on the CDX website on 10/14/2022
- 2. Quarterly Bio-Toxicity Results mailed to MADEP Division of Watershed Management on 10/14/2022

6.2 NPDES COMPLIANCE

The facility will be reporting (0) exceedance(s) for the month of September 2022

Date	Plant Flow	BOD	BOD	TSS	TSS	NH3	Total P	Ph	Fecal Coliform	Aluminum	Copper	Dissolved Oxygen	Limits	Monthly Avg.	Weekly Avg.	Daily Max
	MGD	Mg/L	Lbs./Day	Mg/L	Lbs./Day	Mg/L	Mg/L	Ph	CFU/100 ml	Ug/L	Ug/L	Mg/L	BOD			
Thu Sept 1	1.590	2.0	27	2.0	27	0.10	0.08	7.59				8.4	Oct. 1 - Aprill	20 Mg/L	20 Mg/L	30 Mg/l
Fri Sept 2	1.550							7.46				7.8	30	417 bs/day	417 lbs/Day	626 lbs/Day
Sat Sept 3	1.600							7.41				8.5	May1 - Sept.	6 Mg/L	6 Mg/L	10Mg/L
Sun Sept 4	1.610							7.42	35			8.7	30	125 Lbs/Day	125 lbs/Day	209 Lbs/day
Mon Sept 5	1.830							7.55	30			8.0	TSS			
Tues Sept 6	1.900	2.0	32	3.3	52	0.10	0.09	7.51	86	6	4.3	8.4	Oct. 1 - Aprill	20 Mg/L	20 Mg/L	30 Mg/l
Wed Sept 7	1.910							7.49				8.2	30	417 Lbs/Day	417 Lbs/Day	626 lbs/Day
Thu Sept 8	1.710	2.0	29	2.0	29	0.10	0.04	7.45				8.6	May1 - Sept.	10 Mg/L	10 Mg/L	15Mg/L
Fri Sept 9	1.700							7.49				8.3	30	209 Lbs/Day	209 lbs/Day	313 Lbs/day
Sat Sept 10	1.790							7.48				8.2	NH3			
Sun Sept 11	1.860							7.52	29			8.5	Oct.1 - Mar.	0011.1	0014.4	5714.4
Mon Sept 12	1.770	2.0	30	3.3	49	0.20	0.06	7.53	77			7.7	31	3.3 Mg/L	3.3 Mg/l	5.7 Mg/L
Tues Sept 13	1.820							7.53	336			7.8	Apr. 1 - May	0514.4	0514.4	5711.4
Wed Sept 14	1.810	2.0	30	2.0	20	0.10	0.11	7.51				8.1	31	2.5 Mg/L	2.5 Mg/l	5.7 Mg/l
Thu Sept 15	1.710							7.57				8.1	June1 -			
Fri Sept 16	1.670							7.48				8.9	Sept. 30	1.0 Mg/L	1.0 Mg/L	1.5 Mg/L
Sat Sept 17	1.740							7.48				8.8	Total Phpsp	horus		
Sun Sept 18	1.870							7.42	27			8.7	Apr.1 -	0011.1	********	*******
Mon Sept 19	1.710							7.53	58			8.1	Oct.31	0.2 Mg/L		********
Tues Sept 20	1.710	2.0	29	2.0	29	0.10	0.07	7.39	202			8.8	Nov. 1 - Mar.		*******	*******
Wed Sept 21	1.720							7.24				8.0	31	1.0 Mg/L	*********	******
Thu Sept 22	2.150	3.0	54	3.8	68	0.10	0.07	7.27				8.3	Ph			
Fri Sept 23	1.970							7.34				8.2		6.5	- 8.3	
Sat Sept 24	1.940							7.19				8.6	Fecal			
Sun Sept 25	2.230							7.21	26			9.3	******	200	*******	400
Mon Sept 26	1.840							7.30	90			9.0	********	CFU/100ml	********	CFU/100ml
Tues Sept 27	1.900	2.0	32	4.0	63	0.10	0.13	7.24	206			8.7	Aluminum			
Wed Sept 28	1.890							7.29				8.7	******	88 ug/l	******	*******
Thu Sept 29	1.850	2.0	31	4.30	66	0.15	0.14	7.20				9.0	Copper			
Fri Sept 30	1.880							7.08				9.1				
Daily Max	2.230	3.00	53.79	4.30	68.14	0.20	0.14	7.59	336	******	******	******	May 1 -		> 7.4 mg/L	
Daily Min.	1.550	******	******	******	******	******	******	7.08	******	******	******	7.70	Sept. 30	Plant	Flow	
Month Avg.	1.808	2.11	32.67	2.97	45.89	0.12	0.09	7.41	100.167	6	4.3	******	2.5 MGD			
	2.000		02.07		10.07	0.12	0.07		100.107	ı						

7.0 ENERGY CONSUMPTION

7.1 ELECTRICAL OVERVIEW

Due to the billing cycle timing, all electrical data in the MOR will be one month behind. The following data is for electrical consumption during the *August 2022* operating period.

The department used a total of **133,644** *KWH* for the month of August 2022. Of this total, the lift stations accounted for *10.2%*, using *10,344* KWH. The Main Plant accounted for the remaining *123,300* KWH. The KWH/ MG treated was *1,953* for the month, which is *27.25%* higher than the previous 12-month average of *1,399* KWH/MG. The KWH/Lb. BOD Removed was *101,883* KWH/Lb. for the month, which is *32.24%* lower than the previous 12-month average of *1.05* KWH/Lb.

				Monthly	Energy Co	onsumptio	n			
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 '21	3.05	91.41	110,400	1,208	69,519	1.59	204	231	13,316	122,323
Oct '21	3.18	98.51	107,100	1,087	90,595	1.18	231	234	11,923	120,638
Nov '21	3.12	93.74	132,900	1,418	65,739	2.02	201	216	13,538	150,064
Dec '21	2.52	78.08	120,600	1,545	109,345	1.1	201	213	17,164	136,450
Jan '22	2.75	85.26	139,500	1,636	118,805	1.17	225	264	15,850	161,569
Feb '22	4.06	113.62	142,500	1,254	116,417	1.22	234	261	22,069	164,569
Mar '22	3.43	106.19	122,400	1,153	117,284	1.04	222	222	19,576	141,976
Apr '22	2.77	82.96	123,000	1,483	115,947	1.06	198	204	16,322	139,322
May '22	2.19	67.74	123,000	1,816	116,352	1.06	183	198	15,055	138,055
June '22	1.99	59.74	114,900	1,923	129,049	0.89	189	201	12,123	127,023
July '22	1.74	53.9	106,800	1,981	101,883	1.05	198	216	12,123	118,923
Aug '22	1.81	54.23	105,900	1,953	110,510	0.96	186	210	10,344	133,644
Average	2.72	82.12	120,750	1,538	105,120	1.20	206	223	14,950	137,880

	Monthly Lift Station KWH													
Month	Hingham North	Hingham South	Spruce	Butternut	Old Country Way	Market	Woodsbury	Lincoln	Forest	Wheeler	Summer	Milbrook	John Burke	Total
Sep '21	2,740	4,700	170	486	1,044	344	892	159	1,630	58	62	908	123	13,316
Oct '21	2,648	3,900	150	421	885	397	836	185	1,395	52	53	892	109	11,923
Nov '21	2,754	4,000	179	529	908	697	1,142	225	1,667	49	57	1,215	116	13,538
Dec '21	3,279	4,900	188	654	1,244	970	1,416	363	2,116	61	70	1,666	237	17,164
Jan '22	3,246	4,600	187	554	1,270	854	1,264	309	1,742	56	58	1,501	209	15,850
Feb '22	5,072	6,800	230	438	1,573	1,185	1,605	373	2,434	59	68	1,989	243	22,069
Mar '22	3,783	6,200	194	515	1,647	946	1,683	319	2,259	55	61	1,717	197	19,576
Apr '22	2,995	5,100	246	434	1,260	851	1,353	283	1,915	58	67	1,524	236	16,322
May '22	3,149	5,000	215	161	257	964	1,332	280	1,809	72	69	1,562	185	15,055
June '22	2,540	4,300	109	63	853	347	892	168	1,371	59	74	1,234	113	12,123
July '22	2,119	2,900	110	49	741	337	695	134	1,202	49	69	832	89	9,326
Aug '19	2,293	3,200	102	54	871	334	820	153	1,337	54	68	967	91	10,344
Average	3,052	4,633	173	363	1,046	686	1,161	246	1,740	57	65	1,334	162	14,717

8.0 MAINTENANCE

8.1 WORK ORDER OVERVIEW

WO Type	Total This Month	Total This Year
Preventative Maintenance	175	1570
Corrective Maintenance	6	96
Emergency Call Outs Total	2	32

8.2 SIGNIFICANT CORRECTIVE WORK ORDERS FOR THE MONTH

CM Description	WO#
SOARES pumped out Hingham North, Old Country Way, Wheeler, and Woodsbury	19906
Pioneer Electric replaced Grit Chamber VFD	22519
EIS Programmed Butternut into SCADA	22525

8.3 SIGNIGICANT OPEN WORK ORDERS

CM Description	WO #
Lime Unloader #3 Corrective	13568
Hingham South Pump #1 Replacement	17427

8.4 EMERGENCY CALL OUTS FOR THE MONTH

Туре	Total this Month	Total this Year
Sewer Back Up / Collection System	2	8
Pump Station	1	10
Plant	0	3
Odor	0	0
Power Outages	1	8
Total:	4	29

8.5 INSPECTIONS / ANNUAL PMS COMPLETED DURING THE MONTH

- 1. All pump station alarms checked
- 2. Spruce probe cleaned weekly
- 3. Eye wash inspections completed weekly
- 4. Fire extinguisher inspections completed monthly
- 5. Apollo Safety Quarterly inspection

8.6 COLLECTION SYSTEM AND IPP ASSISTANCE PERFORMED BY VEOLIA

COLLECTION SYSTEM ASSITANCE:

Туре	Total This Month	Total This Year
Sewer Inspection / Tie-Ins	0	0
Sewer Location mark Outs	71	190
Sewer Back Up	2	8

8.7 WORK ORDER STATISTICS

There were **99** total reported maintenance hours during the month. Of this total, outside contractors accounted for **22%** with **22** hours recorded.

