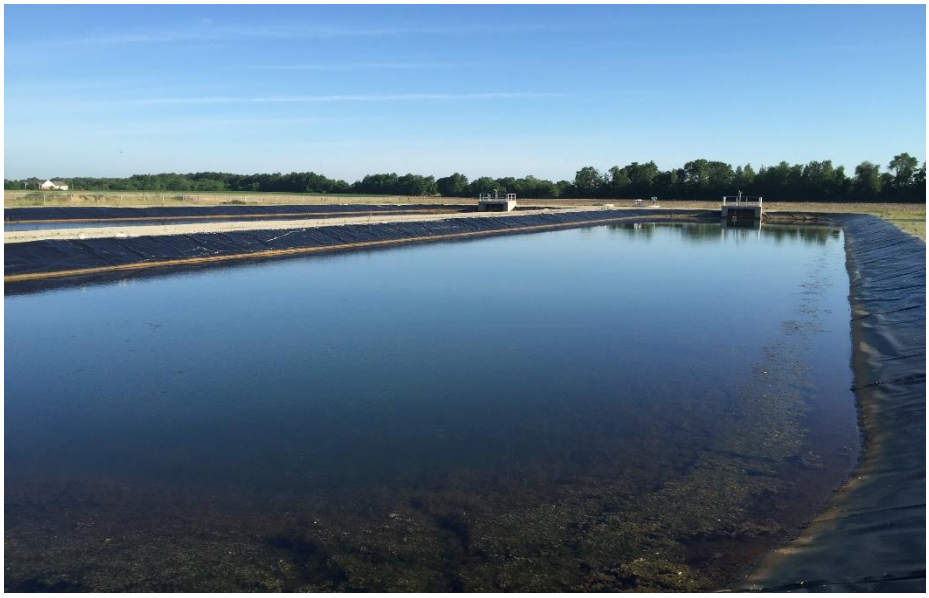
Monthly Operating Report

September:2024



So. Sangamon Water Commission

October 21st, 2024

SSWC

9199 Buckhart Rd Rochester IL 62563

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EXECUTIVE SUMMARY

Safety. Safety is the number one priority at South Sangamon. We have instituted a monthly safety meeting for operations staff at the plant. There were no lost time accidents in the month of September 2024.

Compliance. The finished water quality was within regulatory limits and all reporting and sampling requirements were met for the month. A copy of the Operations Report submitted to the Illinois Environmental Protection Agency is available at **www.sswc.us**

During the month of September 2024, the plant pumped 47.101 million gallons from the well field and 41.594 million gallons of finished water. This is 2.86 million gallons less than September 2023.

The SSWC plant has been removed from Critical Review status.

Operations. There was 0 emergency call-outs for the month. There were numerous customer inquiry for the month.

Maintenance and Repair. For the month of September 2024, there were 30 inspections, 3 preventative and multiple corrective maintenance activity completed. There was 1 repair activities performed .

Budget. Passed at May 20th 2024 meeting.

Capital Planning.

Chatham emergency interconnect

Onsite fuel storage tanks

Detention Tank

Well#11

1. SAFETY

1.1 SAFETY TRAINING

At South Sangamon we strive to provide a safe working environment for all employees. This is accomplished with daily safety meetings and open communication.

1.2 LOST TIME ACCIDENTS

There were 0 lost time accidents in the month of September 2024.

1.3 SAFETY AUDIT

No safety audits to date.

1.4 MISCELLANEOUS SAFETY

No notable safety issues

2. COMPLIANCE, FLOWS AND LOADINGS

2.1 COMPLIANCE

The finished water quality was within regulatory limits and all Bacteriological testing was completed for the month of September. A copy of the Operations Report to the Illinois Environmental Protection Agency (IEPA) is available on the SSWC website.

2.2 INFLUENT FLOWS AND LOADINGS

The total gallons pumped from the well field were 47.101 MG. The influent parameters were all within the normal range.

The influent flow and loadings are summarized below in Table 2.2

Table 2.2 Influent Concentrations and Flow

	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Well Flow Gals (MGD).
Max.	7.70	16.9	1.03	.216	-	368	310	1.811
Min.	4.20	14.3	.32	.142	-	360	280	1.065
Avg.	6.98	15.4	.58	.181	-	358	302	1.570
Total	-	-	-	-	-	-	-	47.101

2.3 EFFLUENT CONCENTRATIONS

The facility filtered 41.594 MG during the month with a daily average of 1.386 MG and a min/max 1.045/ 1.642 MG.

Table 2.3 Finished Water Quality

	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
Max.	0.16	3.94	8.0		0.02	0.440	1.18	210	318	2.29
Min.	0.08	2.16	5.2		0.01	0.019	0.02	100	280	1.87
Avg.	0.11	3.13	7.4		0.01	0.069	0.77	122	303	2.08
MCL	-	-	-	-	1.00	-	4.00	-	-	-
SMCL	-	-	-	-	0.30	0.050	2.00	-	-	-

Finished Water Flow Comparison for FY 2023-24

Time Period	23-24	22-23	21-22
Oct 2023- Sept 2024	412,823,386	426,359,500	412,316,376
Increase for the same period last year		-13.5 MG	14.0 MG

FINISHED WATER PUMPING HISTORY

	2023-24	2022-23	2021-22	2020-21	2019-20	2018-19
Oct	32,733,224	29,576,287	34,918,955	34,597,739	30,769,238	30,353,482
Nov	30,061,570	35,563,717	31,181,005	32,325,040	30,877,400	30,464,000
Dec	31,818,986	30,450,255	31,391,459	31,582,311	29,703,954	31,930,000
Jan	33,807,516	37,721,005	32,322,270	31,456,987	30,073,516	28,823,375
Feb	29,777,768	33,481,076	32,451,653	30,638,842	28,797,693	28,625,431
Mar	31,222,925	36,781,261	33,909,417	33,633,244	30,339,298	31,237,000
Apr	31,707,537	36,832,617	31,991,050	33,214,211	31,542,650	28,418,249
May	36,629,959	43,484,155	37,459,417	35,932,776	34,673,848	33,045,927
June	40,285,085	22,455,176	38,496,145	37,616,256	17,414,377	33,460,303
July	38,944,142	41,565,811	38,861,790	39,001,640	44,237,066	23,742,374
Aug	38,576,284	39,770,720	36,977,913	39,953,900	39,638,063	25,018,633
Sept	37,258,390	38,677,420	32,355,302	38,935,839	38,674,095	34,234,782
	---	---	---	---	---	---
Totals	412,823,386	426,359,500	412,316,376	418,888,785	386,741,198	359,353,556
Avg	1.13 MGD	1.17 MGD	1.13 MGD	1.15 MGD	1.06 MGD	.985 MGD

2.4 LAGOON DISCHARGE CONCENTRATIONS

The results for the NPDES lagoon discharge permit are summarized below.

Table 2.4 Weekly Grab Sample Analysis Results

Lagoon Effluent Results						
Date	**Fe (mg/l)**	**Mn (mg/l)**	**Chloride (mg/l)**	**Cl^2 (mg/l)**	**pH (S.U.)**	**TSS (mg/l)**
Sept 10th, 2024						
Minimum	.06	.114	428.6	.01	7.4	6.8
Maximum	.06	.114	428.6	.01	7.4	6.8
Average	.06	.114	428.6	.01	7.4	6.8
Monthly Avg Limit	***2.000***	***1.000***				***15***
Daily Limit	***4.000***	***2.000***	***500***	***0.05***	***6.0-9.0***	***30***

The Chloride sample for the month, performed by the Springfield Metropolitan Sanitary District, was below 30,000 mg/l for the month of September 2024. The limit for chloride discharge to the sanitary district is 30,000 mg/L.

3. OPERATIONS

3.1 EVENTS IMPACTING OPERATIONS

There were over 50 incident that impacted the operation of the plant.

Ion exchange alarm

Power surge

Power Sag

Ion Exchange Brine Pump

Well Comm loss

Well check valves

3.2 EMERGENCY & SERVICE CALLS

Service Calls:

- There was 0 emergency call out for the month.

3.3 EMERGENCY CALL-OUTS

There was 0 emergency call out for the month.

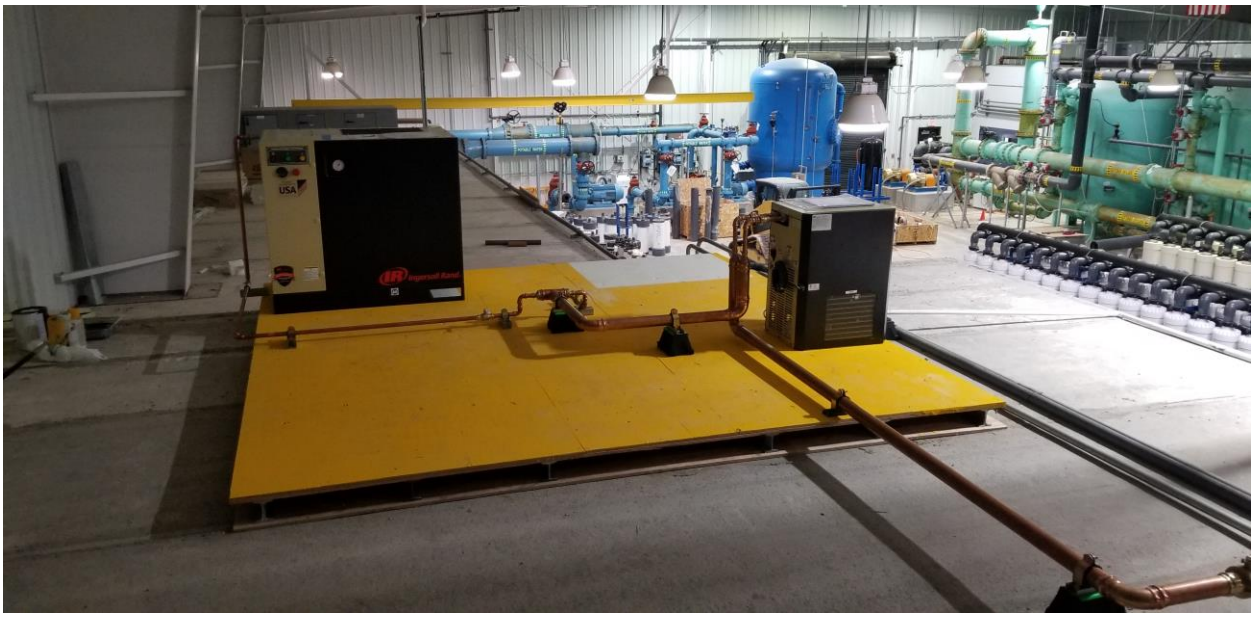
3.4 CUSTOMER INQUIRIE

There were numerous customer inquiries.

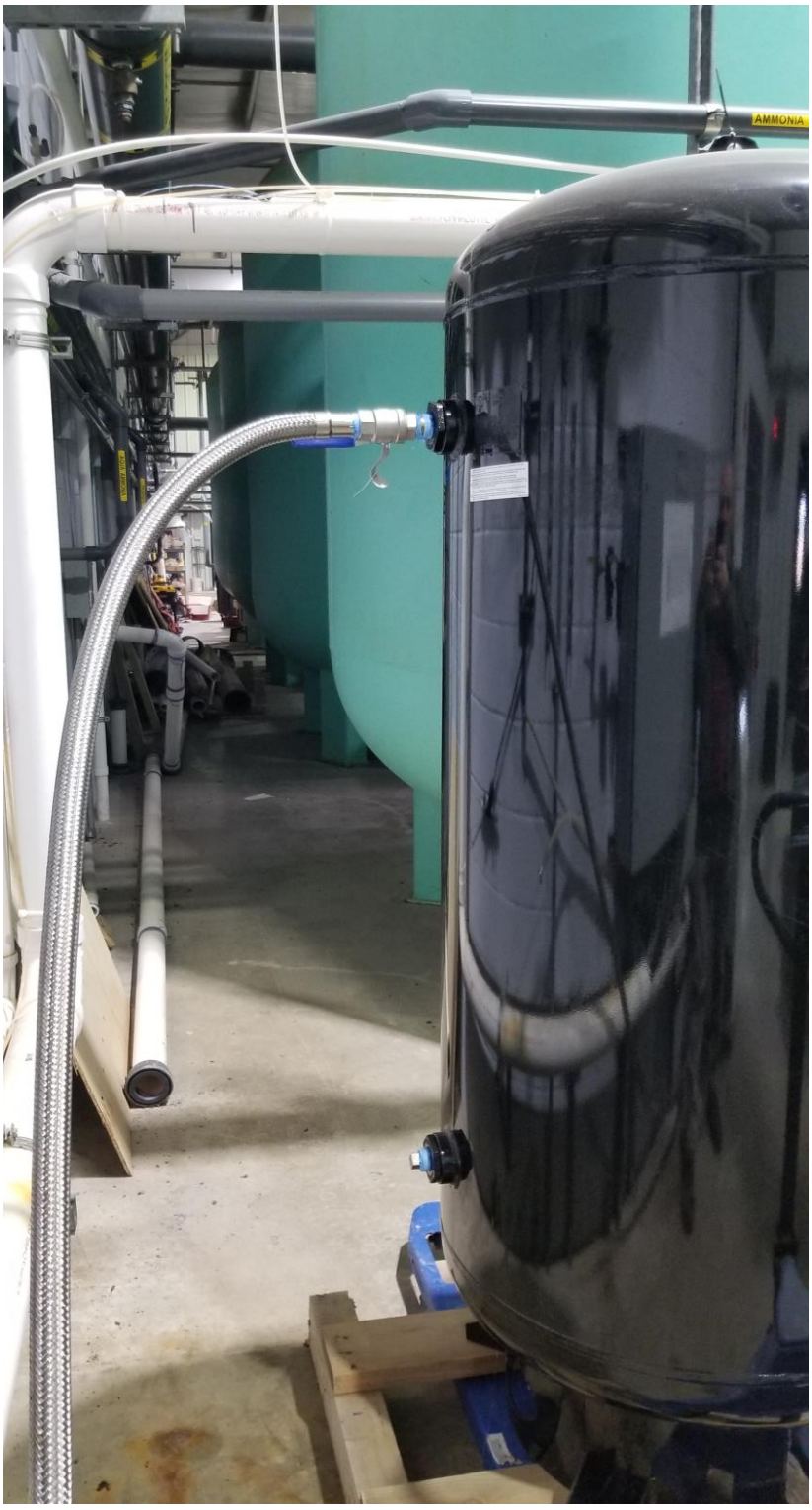
OTHER WORK PERFORMED

Inspected distribution mains
Inspected booster station
Customer service
Air Compressor Mounting Platform
SCADA programming
Mower Maintenance
New scada computers
Interconnect Start Up
Source Water Protection Plan
Well #11 drilling
Train #2 repair
Meter Transmitter Installation

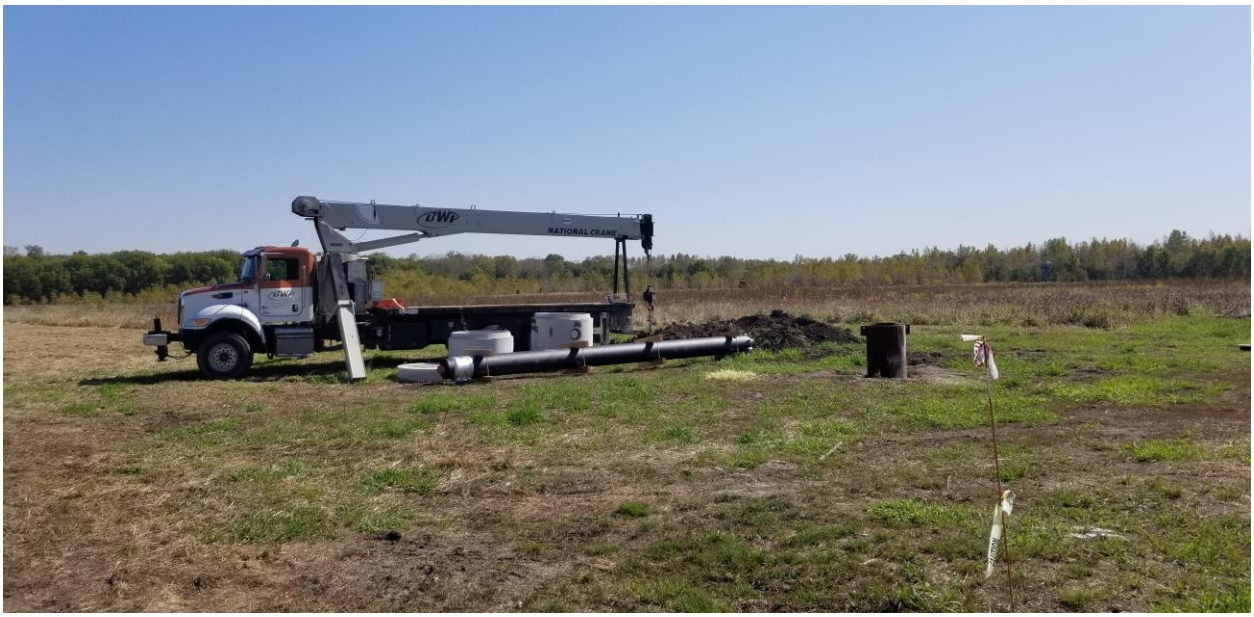
The meter pit and riser for well #11 has arrived on site.



New compressor and drier installed above MCC room. Lee Electric has orderes the supplies to finish the wiring for the compressor.



The 200 gallon compressor air has been softlined in to the air system. This will allow the staff to move the tank if needed.



Brotke was back onsite to prep the riser for installation

4. MAINTENANCE AND REPAIR

4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE

For the month of September 2024, there were 30 inspections, 3 preventative and multiple corrective maintenance activities completed.

4.2 CORRECTIVE REPAIR AND MAINTENANCE

Pulling and cleaning pre filters on all 3 filter trains on weekly basis

CIP train 1,2 and 3

Purged air control system

Air Compressor service

Raw water line flushing

Detention tank flush

Flushing Air Lines

Maintenance of New Berlin Booster Station

Meter Transmitter Replacement

Air compressor Maintenance

Pneumatic Tank Maintenance

Pump Diagnostics

Well Maintenance

5. PROJECT MANAGEMENT & SUPPORT

5.1 STAFFING & TRAINING

- Staff member training has been continuous and ongoing.
- Operator and Asst. Operator have been studying for EPA licensing test.

5.2 OPERATIONAL SUPPORT

The following individuals, either on-site or remotely, provided assistance in operation and/or maintenance of the plant during the month of September 2024.

- Kevin Canham
- Stephen Bivin
- Katie Krall
- Dan (SCADAware)
- Joe Lee Electric
- Kevin Garmin (SCADAware)
- Brotke Well and Pump

5.3 BUDGET

Table 5.3 Operating Budget

Table 5.3 Budget Table

Budget Table was removed: see clerks report

6. CAPITAL PLANNING

6.1 APPROVED CIP PROJECTS CURRENT STATUS

Pigging project construction complete. Awaiting first pigging before completely releasing contractor.

The Chatham /South Sangamon emergency interconnect construction is mostly complete. The valve has arrived and has been installed. Multiple startups have been attempted. Due to various issues start up has not been completed. A new startup date is being planned.

Meter Project progressing, All meter bases and registers are on site. 34 cell meters have been installed.

Well #11 has been drilled. Meter pit is on site.

6.2 DRAFT CAPITAL IMPROVEMENT PLAN

The CIP is a planning document that includes all projects anticipated to exceed $5,000 in cost over the next five years. The CIP is an ongoing process and will be refined from time to time as projects are completed and new issues are identified.

1. Onsite fuel storage tanks have arrived on site and pumps have been installed-completed
2. BOP CPU upgrade has been completed
3. Second raw water detention tank
4. SSWC/Chatham interconnect
5. Well #11
6. SCADA computer upgrade

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF PUBLIC WATER SUPPLIES

South Sangamon Water Commission - IL1670080

September 2024

	Physical and Chemical Tests																																		Membrane Integrity		
	Raw						Pre UF Membrane				Post UF Membrane			Post IEX				Finished																		Post Filter		
			Total	Total	Total	Total	Turbidity	Total	Total	Soluble	Total	Total	Turbidity	1	2	3	4		Turbidity	Total	Total	Total	Total	Fluoride	Ortho	Free	Mono-	Chlorine										
Date	pH	Temp	Alk.	Hard.	Fe	Mn		Fe	Mn	Mn	Fe	Mn		Chloride				pH		Alk.	Hard.	Fe	Mn	F	Phosphate	Ammonia	Chloramine	F	T	Distrbution								
		deg. C	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		NTU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/l	mg/l	mg/l	mg/L	F	T	Bank 1	Bank 2	Bank 3			
			as CaCO3																	as CaCO3										mg/l	mg/L	psi	psi	psi			
1	7.20	15.1	310	358	0.71	0.201			0.298	0.081	0.01	0.071	0.22					7.40	0.17	318	104	0.01	0.190	0.81	2.01	0.02	3.09	0.11	3.79									
2	7.20	15.1	310	352	0.48	0.196			0.208	0.061	0.01	0.069	0.20					7.40	0.22	306	100	0.01	0.019	0.74	2.24	0.02	3.00	0.11	3.79									
3	7.30	15.0	300	350	0.39	0.176			0.224	0.080	0.01	0.072	0.18					7.50	0.20	300	100	0.01	0.045	0.79	2.18	0.08	3.52	0.15	3.56									
4	7.10	15.2	280	350	0.54	0.175			0.274	0.067	0.01	0.073	0.25					7.50	0.24	280	110	0.01	0.025	0.53	2.05	0.02	3.70	0.12	3.94									
5	7.20	16.3	300	360	0.57	0.162			0.651	0.057	0.01	0.053	0.28					7.60	0.23	300	100	0.01	0.028	0.88	2.29	0.05	3.34	0.13	3.42									
6	7.10	16.0	310	355	0.66	0.168			0.314	0.073	0.01	0.071	0.24					7.70	0.22	300	110	0.01	0.039	0.92	2.14	0.01	3.11	0.10	3.76			pass	pass	pass			
7	7.20	15.8	300	350	0.39	0.173			0.303	0.054	0.01	0.067	0.26					7.60	0.24	300	100	0.01	0.036	0.80	2.18	0.01	3.16	0.10	3.48									
8	7.10	15.7	310	360	0.42	0.165			0.289	0.049	0.01	0.055	0.27					7.70	0.26	300	110	0.01	0.032	0.76	2.02	0.01	3.28	0.11	3.56									
9	7.10	15.3	300	360	0.36	0.162			0.310	0.047	0.01	0.077	0.28					7.70	0.24	300	110	0.01	0.051	0.75	1.87	0.06	3.21	0.12	3.40									
10	7.10	15.3	300	360	0.70	0.177			0.270	0.084	0.01	0.076	0.25					7.40	0.21	300	210	0.02	0.054	0.63	2.18	0.01	3.04	0.11	3.10									
11	7.20	15.6	300	360	0.64	0.166			0.236	0.067	0.01	0.073	0.23					7.60	0.18	300	180	0.02	0.056	0.56	1.87	0.01	2.55	0.11	3.18									
12	7.30	14.9	308	352	0.53	0.204			0.302	0.104	0.01	0.090	0.25					7.60	0.17	310	180	0.01	0.050	0.73	2.11	0.02	2.81	0.10	2.99									
13	7.10	14.5	310	360	1.03	0.188			0.320	0.078	0.01	0.063	0.23					7.40	0.20	306	140	0.01	0.033	1.18	2.10	0.01	2.79	0.13	3.35									
14	7.20	14.3	306	358	0.77	0.179			0.280	0.070	0.01	0.071	0.21					7.40	0.21	310	120	0.01	0.029	0.83	2.06	0.01	2.61	0.08	3.15									
15	7.20	14.5	308	360	0.69	0.191			0.236	0.074	0.01	0.810	0.22					7.50	0.20	306	160	0.01	0.021	0.94	2.10	0.02	2.89	0.10	2.99									
16	5.30	15.2	300	368	0.82	0.206			0.292	0.118	0.01	0.099	0.32					5.40	0.28	300	110	0.01	0.071	0.02	2.03	0.01	0.69	0.16	3.30									
17	5.50	15.3	300	355	0.83	0.201			0.328	0.093	0.02	0.086	0.36					5.20	0.29	300	100	0.01	0.440	0.35	2.10	0.01	3.38	0.12	3.62									
18	4.20	15.2	300	360	0.72	0.142			0.267	0.108	0.01	0.094	0.28					5.20	0.25	300	100	0.01	0.049	0.82	2.15	0.05	3.09	0.10	3.40									
19	4.50	16.2	300	350	0.67	0.186			0.302	0.117	0.01	0.101	0.26					5.80	0.24	300	110	0.01	0.032	0.93	1.98	0.01	2.81	0.14	3.12									
20	7.60	15.5	300	360	0.62	0.216			0.227	0.124	0.01	0.126	0.29					8.00	0.25	300	140	0.01	0.046	0.76	2.13	0.04	2.68	0.13	2.82									
21	7.70	15.4	300	360	0.50	0.210			0.198	0.090	0.01	0.117	0.25					8.00	0.23	300	130	0.01	0.030	0.82	2.18	0.04	2.72	0.15	2.98									
22	7.60	15.4	300	365	0.32	0.192			0.186	0.072	0.01	0.110	0.18					7.90	0.20	300	125	0.01	0.026	0.80	2.04	0.05	2.47	0.13	3.11									
23	7.50	15.6	300	360	0.62	0.181			0.426	0.130	0.01	0.120	0.23					7.90	0.21	300	120	0.01	0.047	0.84	2.29	0.08	2.16	0.09	2.60									
24	7.30	15.2	300	352	0.71	0.178			0.384	0.121	0.01	0.109	0.21					7.60	0.19	310	122	0.01	0.041	0.77	2.10	0.04	2.09	0.08	2.16									
25	7.40	15.3	300	358	0.65	0.178			0.990	0.145	0.01	0.120	0.20					7.50	0.31	306	116	0.01	0.061	0.87	1.97	0.04	2.22	0.16	2.67									
26	7.50	15.1	302	362	0.47	0.186			0.567	0.137	0.02	0.092	0.19					7.90	0.33	310	140	0.01	0.045	0.79	1.94	0.10	2.41	0.09	3.07									
27	7.50	16.5	300	360	0.47	0.162			0.333	0.123	0.01	0.123	0.21					8.00	0.32	310	110	0.01	0.031	0.78	1.93	0.03	2.24	0.10	2.38									
28	7.40	15.1	300	356	0.44	0.160			0.384	0.131	0.01	0.096	0.19					7.70	0.29	316	110	0.01	0.030	0.79	1.94	0.04	2.21	0.08	2.28									
29	7.40	15.2	308	358	0.48	0.171			0.406	0.129	0.01	0.092	0.17					7.70	0.28	312	104	0.01	0.380	0.79	1.97	0.05	2.41	0.08	2.67									
30	7.50	16.9	300	360	0.34	0.185			0.166	0.070	0.01	0.130	0.20					8.00	0.25	280	100	0.01	0.036	0.98	2.14	0.01	1.98	0.08	2.26			pass	pass	pass			
31																																					
Ave.	6.98	15.4	302	358	0.58	0.181	#DIV/0!	#DIV/0!	0.332	0.092	0.01	0.114	0.24	#####	#####	#####	#####	7.36	0.24	303	122	0.01	0.069	0.77	2.08	0.03	2.72	0.11	3.13	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
Max	7.70	16.9	310	368	1.03	0.216	0.00	0.00	0.990	0.145	0.02	0.810	0.36	0	0	0	0	8.00	0.33	318	210	0.02	0.440	1.18	2.29	0.10	3.70	0.16	3.94	0.00	0.00	0.00	0.00	0.00		
Min	4.20	14.3	280	350	0.32	0.142	0.00	0.00	0.166	0.047	0.01	0.053	0.17	0	0	0	0	5.20	0.17	280	100	0.01	0.019	0.02	1.87	0.01	0.69	0.08	2.16	0.00	0.00	0.00	0.00	0.00		

Lagoon Effluent Tests		pH	Temp	T Chlor	Mn	Fe	Chloiride	TSS
Monthly			°C	mg/l	mg/l	mg/l	mg/L	mg/L
Date	9/10/2024	7.4	21.3	0.01	0.114	0.06	428.6	6.8

Distribution Stability Tests		pH	Temp	TDS	Alkalinity	Calcium	Chloiride	Sulfate	Remarks:
Every Two Weeks			°C	mg/L	mg/L as CaCO3		mg/L	mg/L	
Date	9/10/2024	7.84	18.9	390	290		41	50	
Date									
Date									

South Sangamon Water Commission

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY — MONTHLY IRON REMOVAL AND ION EXCHANGE SOFTENING REPORT

DIVISION OF PUBLIC WATER SUPPLIES

South Sangamon Water Commission - IL 1670080

September 2024

		Pumping Totals						Chemicals Applied														UF Filters					Softeners							
								Sodium Permanganate		Sodium Bisulfite BW		Sodium Hypochlorite		Ammonium Sulfate		Fluorosilicic Acid		Phosphate		Sodium Bisulfite Pond		Hours since previous backwash				Wash	Water	Water	Each day indicate total number of				Regeneration	
	Time	Hours	Raw Well	UF	Plant	HS	Lagoon Effluent	Am't		Am't		Am't		Am't		Am't		Am't		Am't						Water	Softened	Bypassed	hours since previous regeneration.				Salt	Washed
Date	Meter	Filter	Prod.	Filtered	Water	Pumpage	Pumpage	Used	Calc	Used	Calc	Used	Calc	Used	Calc	Used	Calc	Used	Calc	Used	Calc					Gal.	Gal.	Gal	If regeneration at mid-day, indicate				Used	Water
	Read	Ran	(Mgal)	(Mgal)	(Mgal)	(Mgal)	(Mgal)	lbs.	mg/l as NaMnO4	lbs.	mg/l	lbs.	mg/l as Cl	lbs.	mg/l as NH3	lbs.	mg/l as F	lbs.	mg/l as PO4	lbs.	mg/l	Bank # 1	Bank # 2	Bank # 3		(Mgal)	(Mgal)	(Mgal)	hours previous/hours following. 1	2	3	4	lbs.	Gal.
1	7:00	16.9	1.323	1.083	0.014	1.154	0.070	11	0.20	0	0.00	386	5.34	54	1.20	32	0.63	9	0.31	0	0.00	0.66	0.66	0.66		0.037	0.708	0.375	33.0		36.0	65.0	6843	32550
2	7:00	17.8	1.482	1.308	0.013	1.225	0.059	11	0.18	0	0.00	388	4.45	13	0.24	34	0.63	12	0.39	0	0.00	0.66	0.66	0.66		0.048	0.855	0.453			36.0		2281	10850
3	7:00	18.2	1.502	1.346	0.005	1.280	0.088	13	0.21	0	0.00	460	5.12	15	0.27	42	0.75	15	0.46	0	0.00	0.66	0.66	0.66		0.045	0.880	0.466	32.0	67.0	26.0	64.0	9124	43400
4	7:00	21.7	1.799	1.608	0.022	1.434	0.080	11	0.15	0	0.00	391	3.64	9	0.13	32	0.51	13	0.36	0	0.00	0.66	0.66	0.66		0.058	1.051	0.557	35.0		31.0		4562	21700
5	7:00	21.7	1.504	1.338	0.010	1.302	0.067	11	0.18	0	0.00	402	4.50	19	0.34	35	0.61	14	0.43	0	0.00	0.66	0.66	0.66		0.045	0.875	0.463		39.0		32.0	4562	21700
6	7:00	18.6	1.551	1.361	0.011	1.301	0.098	13	0.20	0	0.00	448	4.93	19	0.33	40	0.70	21	0.64	0	0.00	0.66	0.66	0.66		0.055	0.890	0.471	37.0	31.0	30.0	33.0	9124	43400
7	7:00	19.5	1.619	1.469	0.020	1.298	0.080	10	0.15	0	0.00	426	4.35	5	0.08	37	0.65	22	0.67	0	0.00	0.66	0.66	0.66		0.047	0.960	0.509	33.0		32.0	31.0	6843	32550
8	7:00	18.6	1.553	1.390	0.018	1.292	0.075	8	0.12	0	0.00	358	3.86	2	0.03	32	0.56	26	0.80	0	0.00	0.66	0.66	0.66		0.053	0.908	0.482		41.0	24.0		4562	21700
9	7:00	18.0	1.458	1.271	0.008	1.253	0.087	12	0.20	0	0.00	434	5.12	5	0.09	39	0.71	72	2.27	0	0.00	0.66	0.66	0.66		0.044	0.831	0.440	34.0	29.0	32.0	33.0	9124	43400
10	7:00	21.5	1.755	1.582	0.024	1.409	0.091	13	0.18	0	0.00	444	4.21	7	0.11	38	0.61	6	0.17	0	0.00	0.66	0.66	0.66		0.058	1.034	0.548	35.0	30.0		30.0	6843	32550
11	7:00	21.4	1.756	1.558	0.014	1.478	0.080	13	0.18	0	0.00	452	4.35	35	0.54	40	0.62	11	0.29	0	0.00	0.66	0.66	0.66		0.058	1.018	0.540			28.0	29.0	4562	21700
12	7:00	20.9	1.772	1.521	0.014	1.421	0.090	11	0.15	0	0.00	364	3.59	17	0.27	31	0.50	12	0.33	0	0.00	0.66	0.66	0.66		0.057	0.994	0.527	36.0	35.0	32.0		6843	32550
13	7:00	19.4	1.518	1.114	0.018	1.354	0.095	13	0.21	0	0.00	430	5.79	13	0.28	39	0.66	-37	-1.08	0	0.00	0.66	0.66	0.66		0.052	0.728	0.386	36.0	35.0	29.0	31.0	9124	43400
14	7:00	19.9	1.717	1.539	0.017	1.286	0.077	12	0.17	0	0.00	388	3.78	18	0.28	35	0.62	13	0.40	0	0.00	0.66	0.66	0.66		0.055	1.006	0.533			30.0	34.0	4562	21700
15	7:00	20.2	1.683	1.380	0.013	1.443	0.081	13	0.19	0	0.00	432	4.69	20	0.35	38	0.60	16	0.44	0	0.00	0.66	0.66	0.66		0.048	0.902	0.478	34.0	39.0		33.0	6843	32550
16	7:00	18.5	1.578	1.334	0.015	1.279	0.086	12	0.18	0	0.00	454	5.10	10	0.18	41	0.73	20	0.62	0	0.00	0.66	0.66	0.66		0.053	0.872	0.462	34.0	32.0	31.0		6843	32550
17	7:00	21.9	1.811	1.619	0.018	1.522	0.080	14	0.19	0	0.00	448	4.15	5	0.07	40	0.60	24	0.62	0	0.00	0.66	0.66	0.66		0.058	1.058	0.561			21.0	29.0	4562	21700
18	7:00	21.9	1.811	1.604	0.014	1.509	0.104	15	0.20	0	0.00	470	4.39	6	0.09	45	0.68	50	1.31	0	0.00	0.66	0.66	0.66		0.061	1.048	0.556	35.0	34.0	31.0	31.0	9124	43400
19	7:00	21.9	1.773	1.617	0.016	1.490	0.087	11	0.15	0	0.00	396	3.67	6	0.09	38	0.58	84	2.23	0	0.00	0.66	0.66	0.66		0.054	1.057	0.560	41.0	36.0	28.0		6843	32550
20	7:00	22.0	1.765	1.548	0.017	1.483	0.085	10	0.14	0	0.00	334	3.23	6	0.09	32	0.49	6	0.16	0	0.00	0.66	0.66	0.66		0.063	1.012	0.536			30.0	55.0	4562	21700
21	7:00	18.9	1.566	1.373	0.013	1.285	0.074	14	0.21	0	0.00	382	4.17	10	0.17	46	0.82	13	0.40	0	0.00	0.66	0.66	0.66		0.052	0.897	0.476	37.0	36.0			4562	21700
22	7:00	18.7	1.581	1.642	0.010	1.290	0.095	7	0.11	0	0.00	282	2.57	6	0.09	27	0.48	9	0.28	0	0.00	0.66	0.66	0.66		0.062	1.073	0.569	36.0		30.0	32.0	6843	32550
23	7:00	18.5	1.502	1.126	0.021	1.313	0.074	10	0.16	0	0.00	383	5.10	10	0.21	41	0.71	15	0.45	0	0.00	0.66	0.66	0.66		0.041	0.736	0.390		39.0	32.0	35.0	6843	32550
24	7:00	21.4	1.810	1.609	0.014	1.522	0.077	7	0.09	0	0.00	232	2.16	7	0.10	31	0.46	12	0.31	0	0.00	0.66	0.66	0.66		0.066	1.052	0.557	39.0				2281	10850
25	7:00	16.4	1.396	1.234	0.005	1.146	0.064	7	0.12	0	0.00	314	3.81	10	0.19	28	0.56	12	0.41	0	0.00	0.66	0.66	0.66		0.042	0.807	0.427	33.0		43.0		4562	21700
26	7:00	16.4	1.262	1.180	0.014	1.161	0.070	7	0.13	0	0.00	336	4.27	6	0.12	33	0.65	14	0.48	0	0.00	0.66	0.66	0.66		0.048	0.771	0.409		71.0	29.0		4562	21700
27	7:00	13.5	1.065	1.265	0.014	0.832	0.056	7	0.16	0	0.00	324	3.84	9	0.17	33	0.90	17	0.81	0	0.00	0.66	0.66	0.66		0.045	0.827	0.438	37.0				2281	10850
28	7:00	17.5	1.370	1.258	0.010	1.158	0.075	6	0.11	0	0.00	286	3.41	5	0.10	29	0.57	17	0.58	0	0.00	0.66	0.66	0.66		0.042	0.822	0.436		49.0	38.0		6843	32550
29	7:00	15.2	1.148	1.045	0.010	1.046	0.078	7	0.15	0	0.00	322	4.62	12	0.28	31	0.68	29	1.10	0	0.00	0.66	0.66	0.66		0.035	0.683	0.362	39.0	38.0	33.0	11,138.0	9124	43400
30	7:00	21.3	1.671	1.272	0.022	1.411	0.073	7	0.10	0	0.00	334	3.94	12	0.23	33	0.53	64	1.79	0	0.00	0.66	0.66	0.66		0.051	0.831	0.441	34.0		32.0		4562	21700
31									#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!	0.66	0.66	0.66				0.000						
Total		578.3	47.101	41.594	0.434	39.377	2.390	316	#DIV/0!	0	#DIV/0!	11500	#DIV/0!	371	#DIV/0!	1072	#DIV/0!	611	#DIV/0!	0	#DIV/0!					1.533	27.186	14.408	710	681	744	11,735	180199	857150
Ave.		19.3	1.570	1.386	0.014	1.313	0.080	10.5	#DIV/0!	0	#DIV/0!	383	#DIV/0!	12	#DIV/0!	35.7	#DIV/0!	20.4	#DIV/0!	0.0	#DIV/0!	0.66	0.66	0.66	#DIV/0!	0.051	0.906	0.465	35.5	40.1	31.0	690.3	6006.63	28571.7
Max		22.0	1.811	1.642	0.024	1.522	0.104	15.0	#DIV/0!	0	#DIV/0!	470	#DIV/0!	54	#DIV/0!	46	#DIV/0!	84	#DIV/0!	0	#DIV/0!	0.66	0.66	0.66	0	0.066	1.073	0.569	41.0	71.0	43.0	11,138.0	9,124	43,400
Min		13.5	1.065	1.045	0.005	0.832	0.056	6.0	#DIV/0!	0	#DIV/0!	232	#DIV/0!	2	#DIV/0!	27	#DIV/0!	-37	#DIV/0!	0	#DIV/0!	0.66	0.66	0.66	0	0.035	0.683	0.000	32.0	29.0	21.0	29.0	2281	10850

1	20	% Sodium Permanganate	Post-aerator
2	40	% BisulfiteSolution	Membrane Backwash
3	12.5	% Sodium Hypochlorite Solution	Post Softener
4	20	% Ammonium Sulfate Solution	Post Clearwell
5	19	% Fluorosilicic Acid Solution	Post Clearwell
6	33	% Phosphate Solution	Post Clearwell
7	40	% BisulfiteSolution	Lagoon Effluent

CHLORINATION

Type of Chlorine Used: Sodium Hypochlorite 12.5 %

Chlorine Analyzers Used: Hach CL17 (2) & 5500sc

FLUORIDATION

Type of Fluoride Used: Hydrofluosilicic Acid 19% F

Fluoride Analyzer Used: Hach 2200, SPADNS method

I certify that the information in this report is complete and accurate to the best of myknowledge.

Reported by: _____ Illinois Operator Certification ID: 253419999

Date: 10/10/2024

Date Bacterials Se: 9/26/2024