Monthly Operating Report

May:2024

So. Sangamon Water Commission

June 17th, 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 May 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 May 2024, the plant pumped 39.339 million gallons from the well field and 32.082 million gallons of finished water. This is 7.1 million gallons less than May 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 May 2024, there were 31 inspections, 3 preventative and multiple corrective maintenance activity completed. There was 2 repair activities performed .

Budget. Passed at April 17th 2023 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 May 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 May. 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 47.485 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.	7.5	15.7	5.63	.286	-	365	316	1.893
Min.	6.7	14.0	.36	.130	-	335	280	1.269
Avg.	6.95	14.5	1.09	.176	-	356	299	1.532
Total	-	-	-	-	-	-	-	47.485

2.3 EFFLUENT CONCENTRATIONS

The facility filtered 41.767 MG during the month with a daily average of 1.347 MG and a min/max 1.118/ 1.681 MG.

Table 2.3 Finished Water Quality

	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
Max.	0.16	4.08	7.7		0.03	0.044	.97	300	316	1.85
Min.	0.05	3.31	7.0		0.01	0.001	0.40	100	280	1.34
Avg.	0.10	3.65	7.4		0.02	0.020	0.73	112	301	1.64
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
June 2023- May 2024	400,228,612	430,581,523	421,132,861
Increase for the same period last year		-30.353 MG	9.45 MG

FINISHED WATER PUMPING HISTORY

	2023-24	2022-23	2021-22	2020-21	2019-20	2018-19
June	22,455,176	38,496,145	37,616,256	17,414,377	33,460,303	34,040,000
July	41,565,811	38,861,790	39,001,640	44,237,066	23,742,374	41,178,722
Aug	39,770,720	36,977,913	39,953,900	39,638,063	25,018,633	35,176,238
Sept	38,677,420	32,355,302	38,935,839	38,674,095	34,234,782	34,754,000
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
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Totals	400,228,612	430,581,523	421,132,861	403,344,751	363,233,689	388,046,424
Avg	1.09 MGD	1.18 MGD	1.15 MGD	1.11 MGD	.992 MGD	1.06 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)**
May 14th, 2024						
Minimum	.04	.036	402.6	.01	7.6	6.4
Maximum	.04	.036	402.6	.01	7.6	6.4
Average	.04	.036	402.6	.01	7.6	6.4
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 May 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

Westech filters comm loss

Power surge

Power Sag

Power Outages

Ion Exchange Brine Pump

Well Comm loss

Train #3 repair

3.2 EMERGENCY & SERVICE CALLS

Service Calls:

- There was 0 emergency call out for the month.

3.3 EMERGENCY CALL-OUTS

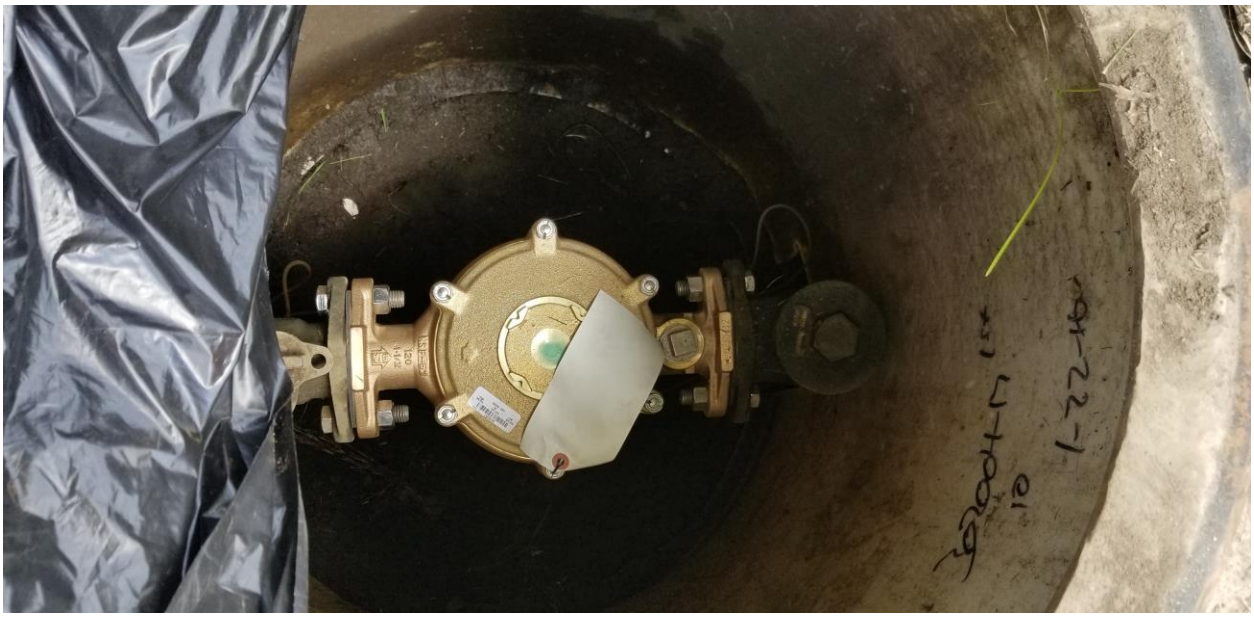
There was 0 emergency call out for the month.

3.4 CUSTOMER INQUIRIE

There were numerous customer inquiries.

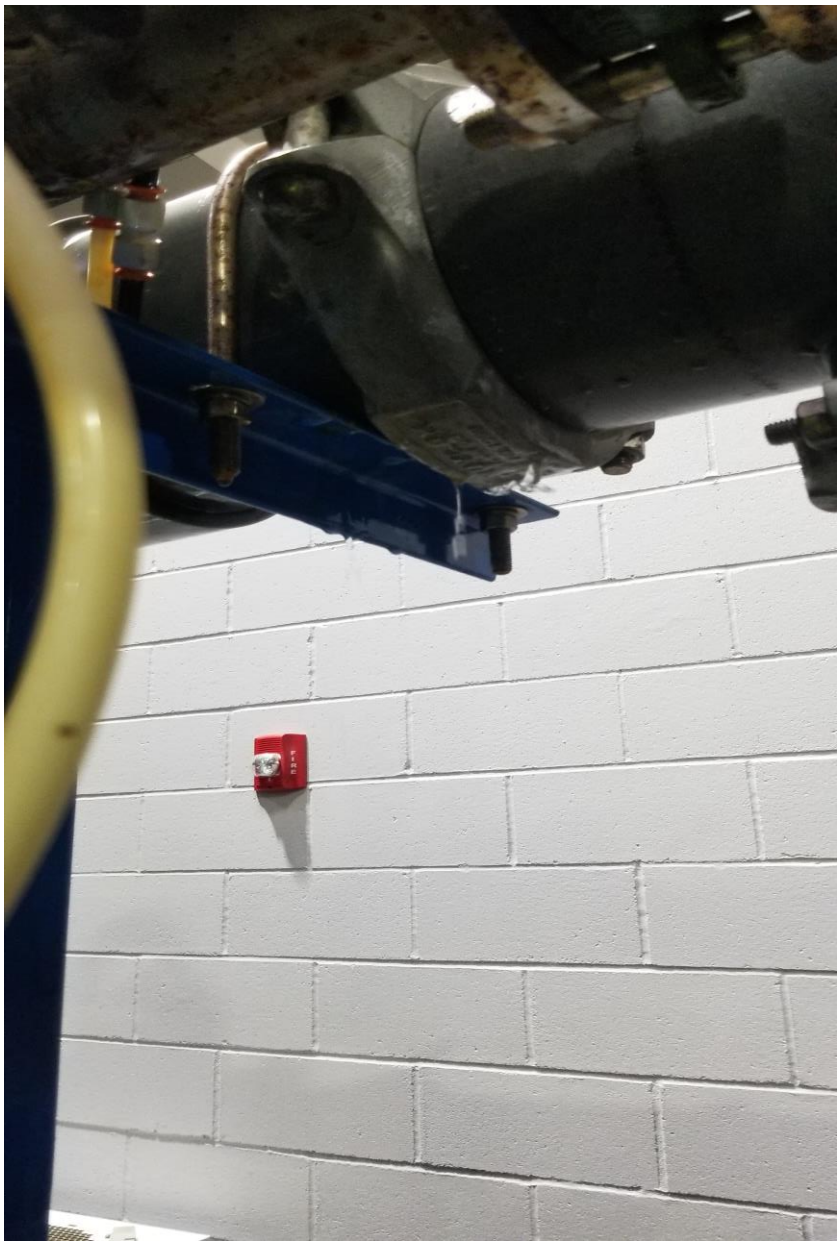
OTHER WORK PERFORMED

Inspected distribution mains
Inspected booster station
Customer service
Air Compressor Mounting Platform
SCADA programming
Mower Maintenance
New scada computers
Interconnect Start Up
Well Transducer installation
Well #3 excavating
Train #3 Repair



Justin King requested a 1.5” be installed. Newly installed meter

Brotke pulling well 5 to install the new transducer



Train #3 began leaking at the inlet side groovelock

After inspection it appears the manifold itself has a fine crack where the groove lock sits. The groove lock was removed and a repair coupler was put on in its place.

SSWC, Petersburg Plumbing, scadaWARE and Benton and Associates attempted the start up procedure for the new interconnect. As this was the first time putting power to the system Dan from scadaWARE had debugging to perform. Synergy Electric was also on site to assist with the electrical portion of the debugging

4. MAINTENANCE AND REPAIR

4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE

For the month of May 2024, there were 31 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

Train #3 Repair

Transducer Install

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 May 2024.

- Kevin Canham
- Stephen Bivin
- Katie Krall
- Dan (SCADAware)
- Joe Lee Electric
- Kevin Garmin (SCADAware)

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. 31 cell meters have been installed.

Meco Engineering has provided us with initial plans for well #11. Well #11 construction permit has been approved and has been received at the plant. Flood Plain Permit has been received and is posted. MECO Engineering has been on site and sample wells have been drilled.

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

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF PUBLIC WATER SUPPLIES

South Sangamon Water Commission - IL1670080

May 2024

Physical and Chemical Tests

Date	Raw pH	Raw Temp deg. C	Raw Total Alk. as CaCO3 mg/L	Raw Total Hard. as CaCO3 mg/L	Raw Total Fe mg/L	Raw Total Mn mg/L	Pre UF Membrane Turbidity NTU	Pre UF Membrane Total Fe mg/L	Pre UF Membrane Total Mn mg/L	Pre UF Membrane Soluble Mn mg/L	Post UF Membrane Total Fe mg/L	Post UF Membrane Total Mn mg/L	Post UF Membrane Turbidity NTU	Post IEX Chloride 1 mg/L	Post IEX Chloride 2 mg/L	Post IEX Chloride 3 mg/L	Post IEX Chloride 4 mg/L	Finished pH	Finished Turbidity NTU	Finished Total Alk. as CaCO3 mg/L	Finished Total Hard. as CaCO3 mg/L	Finished Total Fe mg/L	Finished Total Mn mg/L	Finished Fluoride F mg/L	Finished Ortho Phosphate mg/L	Finished Free Ammonia mg/l	Finished Mono-Chloramine mg/l	Finished Chlorine F mg/l	Finished Chlorine T mg/L	Finished Chlorine Distrbution F mg/l	Finished Chlorine Distrbution T mg/L	Membrane Integrity Post Filter Bank 1 psi	Bank 2 psi	Bank 3 psi
1	7.00	14.4	300	360	0.87	0.169			0.322	0.092	0.03	0.071	0.13					7.60	0.11	290	100	0.02	0.037	0.50	1.51	0.01	3.50	0.10	3.42					
2	6.80	14.8	300	365	1.75	0.197			0.267	0.057	0.01	0.064	0.15					7.40	0.14	290	100	0.01	0.032	0.71	1.55	0.01	3.70	0.07	3.40					
3	6.80	14.3	300	360	0.79	0.178			0.398	0.059	0.02	0.067	0.11					7.40	0.15	300	100	0.03	0.024	0.71	1.49	0.01	3.55	0.16	3.40			pass	pass	pass
4	6.80	14.5	300	360	0.56	0.185			0.333	0.061	0.01	0.060	0.24					7.40	0.18	300	100	0.01	0.036	0.68	1.53	0.01	3.46	0.10	3.60					
5	6.80	14.4	300	350	0.42	0.201			0.303	0.054	0.01	0.056	0.22					7.40	0.20	300	100	0.01	0.030	0.55	1.50	0.01	3.62	0.11	3.70					
6	6.80	14.0	300	335	0.79	0.162			0.330	0.019	0.03	0.040	0.23					7.40	0.21	290	100	0.03	0.019	0.75	1.78	0.01	3.85	0.11	3.56					
7	7.00	14.7	310	350	2.00	0.218			0.316	0.030	0.04	0.038	0.20					7.60	0.24	310	100	0.03	0.035	0.82	1.59	0.03	3.38	0.10	3.30					
8	7.10	14.8	310	360	0.89	0.132			0.267	0.017	0.03	0.019	0.26					7.70	0.24	300	110	0.02	0.015	0.82	1.64	0.01	3.47	0.06	3.92					
9	6.90	14.8	300	360	0.46	0.130			0.230	0.026	0.03	0.026	0.18					7.50	0.13	300	110	0.01	0.024	0.88	1.51	0.06	3.45	0.11	3.58					
10	7.10	14.8	280	360	0.81	0.173			0.269	0.020	0.04	0.067	0.20					7.60	0.16	280	100	0.02	0.044	0.62	1.56	0.01	3.79	0.08	3.38					
11	7.00	14.4	300	358	0.90	0.148			0.272	0.020	0.02	0.033	0.21					7.50	0.18	310	106	0.01	0.029	0.77	1.66	0.02	3.61	0.06	3.41					
12	7.00	14.0	290	362	0.91	0.144			0.264	0.021	0.02	0.029	0.22					7.40	0.14	316	110	0.01	0.022	0.81	1.66	0.03	3.49	0.05	3.51					
13	7.10	14.1	300	358	0.89	0.130			0.230	0.020	0.02	0.026	0.24					7.30	0.19	290	104	0.02	0.024	0.69	1.53	0.02	3.47	0.06	3.80					
14	6.80	14.5	300	360	1.45	0.216			0.298	0.031	0.04	0.023	0.26					7.00	0.17	300	100	0.03	0.012	0.57	1.54	0.01	3.74	0.15	3.62					
15	7.00	14.3	292	356	0.99	0.176			0.277	0.029	0.03	0.021	0.24					7.10	0.20	300	100	0.02	0.016	0.63	1.44	0.02	3.31	0.07	3.41					
16	7.10	14.0	300	350	1.15	0.154			0.265	0.028	0.03	0.011	0.18					7.10	0.13	300	100	0.02	0.029	0.76	1.72	0.02	3.61	0.11	3.42				pass	pass
17	6.80	14.5	300	360	0.78	0.147			0.381	0.029	0.03	0.030	0.16					7.40	0.14	310	120	0.02	0.017	0.77	1.72	0.14	3.85	0.14	3.66			paas		
18	7.00	14.3	300	365	0.60	0.216			0.303	0.027	0.02	0.032	0.22					7.40	0.16	310	100	0.02	0.019	0.82	1.68	0.08	3.70	0.10	3.78					
19	7.00	14.5	300	360	0.36	0.202			0.278	0.030	0.02	0.027	0.27					7.40	0.17	300	100	0.01	0.023	0.80	1.70	0.02	3.54	0.11	3.62					
20	6.90	14.9	300	360	1.54	0.193			0.272	0.011	0.03	0.018	0.17					7.50	0.14	300	120	0.03	0.001	0.40	1.79	0.20	4.08	0.10	3.18					
21	7.50	14.7	300	350	0.43	0.153			0.258	0.021	0.03	0.020	0.19					7.00	0.15	300	120	0.01	0.006	0.77	1.70	0.14	3.42	0.10	3.30					
22	6.80	15.2	300	355	0.50	0.146			0.257	0.014	0.02	0.011	0.20					7.50	0.14	300	100	0.01	0.007	0.97	1.85	0.22	3.88	0.12	3.48					
23	6.80	15.7	300	360	0.64	0.156			0.271	0.019	0.02	0.014	0.18					7.50	0.15	300	110	0.03	0.016	0.72	1.34	0.06	3.93	0.10	3.72					
24	6.90	14.6	280	345	5.63	0.286			0.267	0.018	0.03	0.008	0.22					7.50	0.18	300	100	0.02	0.002	0.76	1.60	0.14	3.82	0.10	3.80					
25	7.10	14.2	310	358	1.41	0.217			0.281	0.019	0.02	0.010	0.19					7.40	0.14	310	104	0.02	0.011	0.72	1.59	0.08	3.80	0.08	3.77					
26	7.10	14.2	316	348	1.18	0.162			0.279	0.022	0.02	0.017	0.18					7.40	0.12	308	100	0.02	0.014	0.81	1.71	0.07	3.90	0.10	3.66					
27	7.10	14.4	292	352	1.01	0.199			0.271	0.017	0.02	0.015	0.19					7.30	0.13	308	106	0.02	0.016	0.77	1.81	0.10		0.09	3.79					
28	6.70	14.3	290	360	0.74	0.175			0.282	0.036	0.03	0.018	0.22					7.00	0.14	300	300	0.02	0.026	0.89	1.84	0.14		0.09	3.68					
29	6.90	14.2	300	360	1.01	0.174			0.265	0.043	0.02	0.034	0.20					7.20	0.17	300	130	0.03	0.011	0.84	1.58	0.12		0.08	3.54					
30	6.80	14.3	300	360	0.56	0.156			0.318	0.033	0.03	0.026	0.22					7.50	0.15	300	100	0.03	0.011	0.72	1.80	0.12		0.08	3.62					pass
31	6.90	15.2	300	340	1.62	0.161			0.481	0.024	0.03	0.035	0.25					7.40	0.18	300	110	0.03	0.011	0.52	1.83	0.01		0.11	3.64			pass	pass	
Ave.	6.95	14.5	299	356	1.09	0.176	#DIV/0!	#DIV/0!	0.294	0.031	0.03	0.031	0.20	#####	#####	#####	#####	7.38	0.16	301	112	0.02	0.020	0.73	1.64	0.06	3.65	0.10	3.57	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Max	7.50	15.7	316	365	5.63	0.286	0.00	0.00	0.481	0.092	0.04	0.071	0.27	0	0	0	0	7.70	0.24	316	300	0.03	0.044	0.97	1.85	0.22	4.08	0.16	3.92	0.00	0.00	0.00	0.00	0.00
Min	6.70	14.0	280	335	0.36	0.130	0.00	0.00	0.230	0.011	0.01	0.008	0.11	0	0	0	0	7.00	0.11	280	100	0.01	0.001	0.40	1.34	0.01	3.31	0.05	3.18	0.00	0.00	0.00	0.00	0.00

Lagoon Effluent Tests Monthly		pH	Temp °C	T Chlor mg/l	Mn mg/l	Fe mg/l	Chloiride mg/L	TSS mg/L
Date	5/14/2024	7.6	15.6	0.01	0.036	0.04	402.6	6.4

Distribution Stability Tests Every Two Weeks		pH	Temp °C	TDS mg/L	Alkalinity mg/L as CaCO3	Calcium	Chloiride mg/L	Sulfate mg/L
Date	5/14/2024	7.25	20.7	470	290		43	50
Date								
Date								

Remarks:

South Sangamon Water Commission

May 2024 Monthly Operating Report

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

DIVISION OF PUBLIC WATER SUPPLIES

South Sangamon Water Commission - IL 1670080

May 2024

		Pumping Totals						Chemicals Applied														UF Filters					Softeners							
			Raw				Lagoon	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	Well	UF	Plant	HS	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	17.5	1.373	1.228	0.010	1.129	0.068	13	0.23	0	0.00	324	3.95	15	0.29	29	0.59	14	0.49	0	0.00	0.66	0.66	0.66		0.046	0.803	0.425	38.0			37.0	4562	21700
2	7:00	18.1	1.354	1.203	0.012	1.140	0.077	14	0.25	0	0.00	342	4.26	1	0.02	33	0.66	27	0.94	0	0.00	0.66	0.66	0.66		0.044	0.786	0.417	43.0	45.0	38.0		6843	32550
3	7:00	17.7	1.434	1.304	0.015	1.171	0.083	12	0.20	0	0.00	344	3.95	20	0.37	30	0.58	46	1.55	0	0.00	0.66	0.66	0.66		0.050	0.852	0.452		41.0	32.0	39.0	6843	32550
4	7:00	17.7	1.383	1.245	0.014	1.154	0.085	16	0.28	0	0.00	342	4.12	18	0.35	30	0.59	1	0.03	0	0.00	0.66	0.66	0.66		0.052	0.814	0.431	39.0		37.0	38.0	6843	32550
5	7:00	18.0	1.402	1.153	0.017	1.157	0.060	16	0.27	0	0.00	354	4.60	50	1.04	32	0.63	5	0.17	0	0.00	0.66	0.66	0.66		0.049	0.754	0.399		39.0			2281	10850
6	7:00	19.0	1.451	1.304	0.009	1.195	0.088	16	0.26	0	0.00	364	4.18	26	0.48	34	0.65	7	0.23	0	0.00	0.66	0.66	0.66		0.055	0.852	0.452	34.0		33.0	33.0	6843	32550
7	7:00	20.8	1.735	1.490	0.012	1.401	0.107	15	0.21	0	0.00	328	3.30	23	0.37	29	0.47	7	0.20	0	0.00	0.66	0.66	0.66		0.064	0.974	0.516	39.0	45.0	32.0	39.0	9124	43400
8	7:00	15.8	1.332	1.175	0.019	1.078	0.070	15	0.27	0	0.00	326	4.16	12	0.24	29	0.61	7	0.26	0	0.00	0.66	0.66	0.66		0.059	0.768	0.407		36.0			2281	10850
9	7:00	14.9	1.269	1.118	0.006	1.071	0.073	16	0.30	0	0.00	346	4.64	25	0.54	31	0.66	8	0.30	0	0.00	0.66	0.66	0.66		0.040	0.731	0.387	36.0		33.0	41.0	6843	32550
10	7:00	16.9	1.368	1.233	0.016	1.125	0.078	15	0.26	0	0.00	328	3.99	13	0.25	31	0.63	8	0.28	0	0.00	0.66	0.66	0.66		0.056	0.806	0.427		41.0	38.0		4562	21700
11	7:00	17.3	1.444	1.232	0.016	1.186	0.062	17	0.28	0	0.00	382	4.65	16	0.31	33	0.63	10	0.33	0	0.00	0.66	0.66	0.66		0.051	0.805	0.427				46.0	2281	10850
12	7:00	17.2	1.403	1.252	0.012	1.124	0.097	17	0.29	0	0.00	388	4.64	18	0.34	35	0.71	10	0.35	0	0.00	0.66	0.66	0.66		0.054	0.818	0.434	78.0	35.0	32.0	32.0	9124	43400
13	7:00	21.1	1.733	1.487	0.020	1.409	0.087	17	0.24	0	0.00	382	3.85	19	0.31	33	0.53	12	0.34	0	0.00	0.66	0.66	0.66		0.065	0.972	0.515		34.0	26.0		4562	21700
14	7:00	18.1	1.467	1.283	0.012	1.186	0.089	16	0.26	0	0.00	340	3.97	35	0.65	31	0.60	13	0.43	0	0.00	0.66	0.66	0.66		0.056	0.839	0.444	39.0		35.0	39.0	6843	32550
15	7:00	18.1	1.461	1.272	0.016	1.183	0.088	17	0.28	0	0.00	392	4.62	26	0.49	36	0.69	15	0.50	0	0.00	0.66	0.66	0.66		0.055	0.831	0.441	44.0	35.0		31.0	6843	32550
16	7:00	17.7	1.405	1.214	0.019	1.128	0.079	14	0.24	0	0.00	344	4.25	30	0.59	30	0.61	25	0.88	0	0.00	0.66	0.66	0.66		0.057	0.793	0.421		38.0	32.0		4562	21700
17	7:00	18.9	1.465	1.361	0.006	1.183	0.093	17	0.28	0	0.00	396	4.36	53	0.93	36	0.69	55	1.84	0	0.00	0.66	0.66	0.66		0.060	0.890	0.471	37.0		33.0	36.0	6843	32550
18	7:00	20.6	1.724	1.453	0.014	1.405	0.095	17	0.24	0	0.00	378	3.90	38	0.63	32	0.52	1	0.03	0	0.00	0.66	0.66	0.66		0.062	0.950	0.503		34.0	33.0	32.0	6843	32550
19	7:00	16.2	1.359	1.172	0.020	1.146	0.093	21	0.37	0	0.00	458	5.86	58	1.19	42	0.83	9	0.31	0	0.00	0.66	0.66	0.66		0.050	0.766	0.406	37.0	35.0	25.0	25.0	9124	43400
20	7:00	21.4	1.856	1.632	0.017	1.566	0.110	18	0.23	0	0.00	414	3.80	49	0.72	37	0.54	9	0.23	0	0.00	0.66	0.66	0.66		0.077	1.067	0.565	29.0	28.0		28.0	6843	32550
21	7:00	21.6	1.893	1.681	0.019	1.569	0.099	22	0.28	0	0.00	468	4.17	57	0.81	43	0.62	13	0.33	0	0.00	0.66	0.66	0.66		0.077	1.099	0.582	32.0		27.0		4562	21700
22	7:00	18.6	1.663	1.594	0.008	1.315	0.109	19	0.27	0	0.00	408	3.84	42	0.63	35	0.61	11	0.33	0	0.00	0.66	0.66	0.66		0.076	1.042	0.552		31.0	32.0	32.0	6843	32550
23	7:00	21.5	1.879	1.529	0.012	1.563	0.113	20	0.26	0	0.00	458	4.49	50	0.78	41	0.60	14	0.35	0	0.00	0.66	0.66	0.66		0.070	0.999	0.530	35.0	28.0	26.0	25.0	9124	43400
24	7:00	21.4	1.838	1.649	0.022	1.530	0.121	19	0.25	0	0.00	400	3.64	49	0.71	33	0.49	14	0.36	0	0.00	0.66	0.66	0.66		0.078	1.078	0.571	34.0	33.0	32.0	25.0	9124	43400
25	7:00	17.4	1.539	1.331	0.019	1.296	0.072	18	0.28	0	0.00	422	4.75	46	0.83	37	0.65	16	0.49	0	0.00	0.66	0.66	0.66		0.061	0.870	0.461				29.0	2281	10850
26	7:00	16.9	1.474	1.296	0.004	1.172	0.094	18	0.29	0	0.00	414	4.79	34	0.63	31	0.60	19	0.64	0	0.00	0.66	0.66	0.66		0.061	0.847	0.449	40.0	33.0	31.0		6843	32550
27	7:00	17.2	1.486	1.326	0.017	1.225	0.055	15	0.24	0	0.00	350	3.96	36	0.65	31	0.58	25	0.81	0	0.00	0.66	0.66	0.66		0.055	0.867	0.459						0
28	7:00	17.0	1.497	1.316	0.001	1.247	0.107	18	0.29	0	0.00	412	4.69	24	0.44	37	0.68	54	1.71	0	0.00	0.66	0.66	0.66		0.064	0.860	0.456	50.0	52.0	54.0	69.0	9124	43400
29	7:00	17.9	1.529	1.480	0.020	1.249	0.099	16	0.25	0	0.00	390	3.95	30	0.49	34	0.62	62	1.96	0	0.00	0.66	0.66	0.66		0.066	0.967	0.513		38.0	36.0	22.0	6843	32550
30	7:00	17.3	1.502	1.347	0.014	1.244	0.086	18	0.29	0	0.00	390	4.34	32	0.57	34	0.62	6	0.19	0	0.00	0.66	0.66	0.66		0.064	0.880	0.467	40.0			30.0	4562	21700
31	7:00	20.5	1.767	1.407	0.009	1.478	0.096	16	0.22	0	0.00	378	4.03	33	0.56	34	0.52	10	0.27	0	0.00	0.66	0.66	0.66		0.063	0.920	0.487	37.0	31.0	27.0		6843	32550
Total		570.3	47.485	41.767	0.427	39.025	2.727	518	8.15	0	0	11762	131.69	978	17.22	1043	19.02	533	17.14	0	0.00					1.837	27.299	14.468	761	732	724	728	187042	889700
Ave.		18.4	1.532	1.347	0.014	1.259	0.088	16.7	0.26	0	0	379	4.25	32	0.56	33.6	0.61	17.2	0.55	0.0	0.00	0.66	0.66	0.66	#DIV/0!	0.059	0.881	0.467	40.1	36.6	32.9	34.7	6234.73	28700
Max		21.6	1.893	1.681	0.022	1.569	0.121	22.0	0.37	0	0	468	5.86	58	1.18676	43	0.83	62	1.96	0	0.00	0.66	0.66	0.66	0	0.078	1.099	0.582	78.0	52.0	54.0	69.0	9,124	43,400
Min		14.9	1.269	1.118	0.001	1.071	0.055	12.0	0.20	0	0	324	3.30	1	0.02	29	0.47	1	0.03	0	0.00	0.66	0.66	0.66	0	0.040	0.731	0.387	29.0	28.0	25.0	22.0	2281	0

1	20	% Sodium Permanganate	Pre-aerator	**CHLORINATION**		**FLUORIDATION**	
2	40	% BisulfiteSolution	Membrane Backwash				
3	12.5	% Sodium Hypochlorite Solution	Post Softener	Type of Chlorine Used	Sodium Hypochlorite 12.5 %	Type of Fluoride Used	Hydrofluosilicic Acid 19% F
4	20	% Ammonium Sulfate Solution	Post Softener				
5	19	% Fluorosilicic Acid Solution	Post Clearwell	Chlorine Analyzers Used: Hach CL17 (2) & 5500sc		Fluoride Analyzer Used: Hach 2200, SPADNS method	
6	33	% Phosphate Solution	Post Clearwell				
7	40	% BisulfiteSolution	Lagoon Effluent				

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: 6/10/2024

Date Bacterials Ser 5/30/24, 5/28/24