



SSWC

9199 Buckhart Rd Rochester IL 62563

Monthly Operating Report

July:2022

So. Sangamon
Water Commission
August 15th, 2022

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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 July 2022.

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 July 2022, the plant pumped 48.940 million gallons from the well field and 43.470 million gallons of finished water. This is 1.8 million gallons less than July of 2021.

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 July 2022, there were 31 inspections, 3 preventative and 3 corrective maintenance activity completed. There was 2 repair activities performed .

Budget. Passed at April 18th 2022 meeting.

Capital Planning.

Chatham emergency interconnect

Onsite fuel storage tanks

Detention Tank

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 July 2022.

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 July. 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 48.940 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.	7.3	15.9	4.61	.341	-	365	320	1.883
Min.	7.1	13.7	.36	.155	-	340	280	0.044
Avg.	7.2	15.0	1.27	.213	-	350	296	1.579
Total	-	-	-	-	-	-	-	48.940

2.3 EFFLUENT CONCENTRATIONS

The facility filtered 43.470 MG during the month with a daily average of 1.402 MG and a min/max .299/ 1.654 MG.

Table 2.3 Finished Water Quality										
	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
Max.	.18	3.14	7.7		0.01	0.052	1.20	200	304	2.23
Min.	0.07	1.83	7.2		0.01	0.005	0.6	80	280	1.68
Avg.	0.11	2.49	7.6		0.01	0.022	0.9	114	290	1.91
MCL	-	-	-	-	1.00	-	4.00	-	-	-
SMCL	-	-	-	-	0.30	0.050	2.00	-	-	-

Finished Water Flow Comparison for FY 2021 -22

Time Period	21-22	20-21	19-20
Aug-2021- July-2022	421,872,900	418,311,204	367,682,455
Increase for the same period last year		3.57 MG	76 MG

FINISHED WATER PUMPING HISTORY						
	21-22	20-21	19-20	18-19	17-18	16-17
Aug	39,953,900	39,638,063	25,018,633	35,176,238	38,760,634	35,401,490
Sept	38,935,839	38,674,095	34,234,782	34,754,000	39,896,986	36,325,215
Oct	34,918,955	34,597,739	30,769,238	30,353,482	33,506,605	4,374,8320
Nov	31,181,005	32,325,040	30,877,400	30,464,000	28,617,333	30,478,309
Dec	31,391,459	31,582,311	29,703,954	31,930,000	28,808,037	32,525,530
Jan	32,322,270	31,456,987	30,073,516	28,823,375	30,556,824	30,449,215
Feb	32,451,653	30,638,842	28,797,693	28,625,431	25,617,914	27,373,232
Mar	33,909,417	33,633,244	30,339,298	31,237,000	28,217,699	30,068,363
Apr	31,991,050	33,214,211	31,542,650	28,418,249	27,110,578	29,625,797
May	37,459,417	35,932,776	34,673,848	33,045,927	33,304,196	32,120,873
June	38,496,145	37,616,256	17,414,377	33,460,303	34,040,000	39,931,402
July	38,861,790	39,001,640	44,237,066	23,742,374	41,178,722	42,164,927
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Totals	421,872,900	418,311,204	367,682,455	370,030,379	389,615,528	410,212,673
Avg	1.15 MGD	1.15 MGD	1.0 MGD	1.01 MGD	1.06 MGD	1.12 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)
July 27th 2022	.17	.086	208	.04	7.6	<4
Minimum	.17	.086	208	.04	7.6	<4
Maximum	.17	.086	208	.04	7.6	<4
Average	.17	.086	208	.04	7.6	<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 July 2022. The limit for chloride discharge to the sanitary district is 30,000 mg/L.

3. OPERATIONS

3.1 EVENTS IMPACTING OPERATIONS

There was 1 incident that impacted the operation of the plant.

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

Trouble shooting all trains
Trouble shooting of CIP skid and CIP procedure
Inspected distribution mains
Inspected booster station
Flushed air system
Trouble shooting of Ion exchange system
Repair of air compressors
Customer service
Discussed taps with customer and EJ water
Replaced well #7 pump and motor
Cleaned tanks



Layne pulling well#7 pump and motor.



Layne installing new pump and motor in well #7. This increased overall well flow considerably.



After the installation of the new pump and motor in well #7 staff flushed the raw water line.



Liquid Engineering was on site to clean and inspect tanks at the plant.

4. MAINTENANCE AND REPAIR

4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE

For the month of July 2022, there were 31 inspections, 3 preventative and 3 corrective maintenance activity completed.

Liquid engineering performed inspections of plant tanks. Recommended replacing the sacrificial anodes in the water plant tanks.

4.2 CORRECTIVE REPAIR

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

Repair of train #3

Replaced pump and motor of well #7

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 July 2022.

- Kevin Canham
- Stephen Bivin
- Katie Krall
- Liquid Engineering
- Layne Well and Pump
- Dan (SCADAware)
- Joe Lee
- 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.

Benton and Assoc has initiated the planning phase of the Chatham Emergency interconnect. Construction permit has been approved and received. Construction has been postponed.

Train #2 upgrade repair has been completed and train #2 is back online.

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. Second Torray filter train has been installed
2. Onsite fuel storage tanks have arrived on site
3. BOP CPU upgrade has been completed
4. Meter Project progressing, meters scheduled to arrive the week of 9/22 tentatively.
5. Second raw water detention tank

