



Monthly Operating Report

August:2021

So. Sangamon
Water Commission
September 20th, 2021

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 August 2021.

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 August 2021, the plant pumped 53.539 million gallons from the well field and 47.054 million gallons of finished water. This is 3.9 million gallons more than August of 2020.

The SSWC plant has been removed from Critical Review status.

Operations. There was 2 emergency call-outs for the month. There were numerous customer inquiry for the month.

Maintenance and Repair. For the month of August 2021, there were 31 inspections, 3 preventative and 3 corrective maintenance activity completed.

Budget. Passed at April 19th 2021 meeting.

Capital Planning.

BOP CPU replacement

New Berlin Meter relocation.

Chatham emergency interconnect

Onsite fuel storage tanks

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 August 2021.

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 August. 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 53.539 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	16.0	2.03	.304	-	380	310	2.060
Min.	7.3	14.8	.62	.173	-	342	280	1.456
Avg.	7.4	15.4	.94	.217	-	360	296	1.727
Total	-	-	-	-	-	-	-	53.539

2.3 EFFLUENT CONCENTRATIONS

The facility filtered 47.054 MG during the month with a daily average of 1.518 MG and a min/max 1.239/ 1.804 MG.

Table 2.3 Finished Water Quality										
	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
Max.	0.24	3.38	7.8		0.1	0.03	.93	280	312	1.96
Min.	0.08	2.82	7.3		0.01	0.002	0.53	96	270	1.65
Avg.	0.13	3.07	7.7		0.02	0.013	0.72	145	288	1.7
MCL	-	-	-	-	1.00	-	4.00	-	-	-
SMCL	-	-	-	-	0.30	0.050	2.00	-	-	-

Finished Water Flow Comparison for FY 2020 -21

Time Period	2020-2021	2019-2020	2018-2019
Sept 2020- Aug 2021	418,627,041	382,301,885	359,872,774
Increase for the same period last year		36.3 MG	22.4 MG

FINISHED WATER PUMPING HISTORY						
	20-21	19-20	18-19	17-18	16-17	15-16
Sept	38,674,095	34,234,782	34,754,000	39,896,986	36,325,215	36,546,171
Oct	34,597,739	30,769,238	30,353,482	33,506,605	34,374,820	34,783,455
Nov	32,325,040	30,877,400	30,464,000	28,617,333	30,478,309	27,217,293
Dec	31,582,311	29,703,954	31,930,000	28,808,037	32,525,530	27,788,637
Jan	31,456,987	30,073,516	28,823,375	30,556,824	30,449,215	28,510,121
Feb	30,638,842	28,797,693	28,625,431	25,617,914	27,373,232	26,095,228
Mar	33,633,244	30,339,298	31,237,000	28,217,699	30,068,363	27,851,811
Apr	33,214,211	31,542,650	28,418,249	27,110,578	29,625,797	29,292,618
May	35,932,776	34,673,848	33,045,927	33,304,196	32,120,873	33,349,391
June	37,616,256	17,414,377	33,460,303	34,040,000	39,931,402	41,541,321
July	39,001,640	44,237,066	23,742,374	41,178,722	42,164,927	35,378,396
Aug	39,953,900	39,638,063	25,018,633	35,176,238	38,760,634	35,401,490
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Totals	418,627,041	382,301,885	359,872,774	386,031,132	404,198,317	383,755,932
Avg	1.14 MGD	1.05 MGD	.986 MGD	1.06 MGD	1.10 MGD	1.05 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)
August 10th, 2021						
Minimum	.06	.039	260	.0	8.0	<4
Maximum	.06	.039	260	.0	8.0	< 4
Average	.06	.039	260			<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 August 2021. The limit for chloride discharge to the sanitary district is 30,000 mg/L.

3. OPERATIONS

3.1 EVENTS IMPACTING OPERATIONS

There was 0 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 of August

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
Added to customer info database
Inspected booster station
Flushed air system
Trouble shooting of Ion exchange system
Replaced ion exchange valve and actuator
Setup VPN
Replaced sump pump in booster station



An accident on old rt 54 caused a car to careen out of control and damage our hydrant.



A grain truck while turning around ran over and damaged our hydrant at the corner of Cardinal Hill and rt 29.



Upon closer inspection it was found that the valve box is also damaged.

4. MAINTENANCE AND REPAIR

4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE

For the month of August 2021, there were 31 inspections, 3 preventative and 3 corrective maintenance activity completed.

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

Replaced sump pump in booster station

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 August 2021.

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

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

New Berlin Meter master meter relocation project is commencing. Engineering and relocation plans have been finalized. Awaiting ground breaking.

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

BOP CPU replace is in the planning phase

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

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 has been ordered
2. Pricing onsite fuel storage tanks to alleviate tax costs and sustainability during emergencies.
3. Revisited BOP CPU upgrade

