



# Monthly Operating Report

June:2023

So. Sangamon  
Water Commission

July 17th, 2023

# 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 June 2023.

**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](http://www.sswc.us)

During the month of June 2023, the plant pumped 32.402 million gallons from the well field and 30.203 million gallons of finished water. This is 12.9 million gallons less than June 2022.

The SSWC plant has been removed from Critical Review status.

**Operations.** There was 6 emergency call-outs for the month. There were numerous customer inquiry for the month.

**Maintenance and Repair.** For the month of June 2023, there were 30 inspections, 3 preventative and multiple corrective maintenance activity completed. There was 2 repair activities performed .

**Budget.** Passed at April 17<sup>th</sup> 2023 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 June 2023.

## 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 June. 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 32.402 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.	7.2	15.2	1.36	.253	-	360	320	2.196
Min.	7.1	13.4	.37	.192	-	300	300	.457
Avg.	7.16	14.2	.66	.225	-	343	309	1.080
Total	-	-	-	-	-	-	-	32.402

### 2.3 EFFLUENT CONCENTRATIONS

The facility filtered 30.203 MG during the month with a daily average of 1.007 MG and a min/max .600/ 1.906 MG.

Table 2.3 Finished Water Quality										
	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
Max.	.20	3.76	7.8		0.05	0.029	1.05	180	330	4.49
Min.	0.05	2.60	7.5		0.01	0.002	0.43	100	290	1.48
Avg.	0.09	3.09	7.6		0.02	0.016	0.75	117	308	2.94
MCL	-	-	-	-	1.00	-	4.00	-	-	-
SMCL	-	-	-	-	0.30	0.050	2.00	-	-	-

### Finished Water Flow Comparison for FY 2022-23

Time Period	22-23	21-22	20-21
July 2022- June-2023	414,540,554	422,012,750	423,546,630
Increase for the same period last year		-7.5 MG	-1.5 MG

FINISHED WATER PUMPING HISTORY						
	2022-23	2021-22	2020-21	2019-20	2018-19	2017-18
July	38,861,790	39,001,640	44,237,066	23,742,374	41,178,722	42,164,927
Aug	36,977,913	39,953,900	39,638,063	25,018,633	35,176,238	38,760,634
Sept	32,355,302	38,935,839	38,674,095	34,234,782	34,754,000	39,896,986
Oct	29,576,287	34,918,955	34,597,739	30,769,238	30,353,482	33,506,605
Nov	35,563,717	31,181,005	32,325,040	30,877,400	30,464,000	28,617,333
Dec	30,450,255	31,391,459	31,582,311	29,703,954	31,930,000	28,808,037
Jan	37,721,005	32,322,270	31,456,987	30,073,516	28,823,375	30,556,824
Feb	33,481,076	32,451,653	30,638,842	28,797,693	28,625,431	25,617,914
Mar	36,781,261	33,909,417	33,633,244	30,339,298	31,237,000	28,217,699
Apr	36,832,617	31,991,050	33,214,211	31,542,650	28,418,249	27,110,578
May	43,484,155	37,459,417	35,932,776	34,673,848	33,045,927	33,304,196
June	22,455,176	38,496,145	37,616,256	17,414,377	33,460,303	34,040,000
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Totals	414,540,554	422,012,750	423,546,630	347,187,763	387,466,727	390,601,733
Avg	1.13 MGD	1.16 MGD	1.16 MGD	.951 MGD	1.06 MGD	1.07 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**

<b>Lagoon Effluent Results</b>						
<b>Date</b>	<b>Fe (mg/l)</b>	<b>Mn (mg/l)</b>	<b>Chloride (mg/l)</b>	<b>Cl<sup>2</sup> (mg/l)</b>	<b>pH (S.U.)</b>	<b>TSS (mg/l)</b>
June 6th, 2023						
Minimum	.08	.16	313.6	.05	7.6	16
Maximum	.08	.16	313.6	.05	7.6	16
Average	.08	.16	313.6	.05	7.6	16
<b>Monthly Avg Limit</b>	<b>2.000</b>	<b>1.000</b>				<b>15</b>
<b>Daily Limit</b>	<b>4.000</b>	<b>2.000</b>	<b>500</b>	<b>0.05</b>	<b>6.0-9.0</b>	<b>30</b>

The Chloride sample for the month, performed by the Springfield Metropolitan Sanitary District, was below 30,000 mg/l for the month of June 2023. The limit for chloride discharge to the sanitary district is 30,000 mg/L.

## 3. OPERATIONS

### 3.1 EVENTS IMPACTING OPERATIONS

**There was 219 incident that impacted the operation of the plant.**

Backwash low flow

Ion exchange alarm

Westech filters comm loss

Low Detention Tank Level

Power surge

Power Sag

Power Outages

Ion Exchange Brine Pump

Well comm loss Alarm

Westech production Failure

### 3.2 EMERGENCY & SERVICE CALLS

#### Service Calls:

- There was 1 emergency call out for the month.

### 3.3 EMERGENCY CALL-OUTS

There was 6 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 research

SCADA programming

New Berlin Booster station trouble shooting

Effluent Pump Install

Cell Transmitter Installation

Brotke cleaning and replacing pump at well #10





Backflushing well #10 after Brotke finished clean the well cleaning



There was a downed tree limb on Buckhart that caused a power interruption.



The powerlines laid on the ground and arched caused multiple surges and sags.



An air valve on Cardinal Hill Rd was leaking. We had Steve Ray Plumbing on site to cap the leak.



When the storms came through the booster station lost power. Lee electric brought a generator out to provide power. The generator had to be started and monitored numerous times a day.







Cameras are installed and operational. Diesel fuel has been delivered

## **4. MAINTENANCE AND REPAIR**

### **4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE**

For the month of June 2023, there were 30 inspections, 3 preventative and multiple 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

Air Compressor service

Raw water line flushing

Detention tank flush

Flushing Air Lines

Maintenance of New Berlin Booster Station

Meter Transmitter Replacement

Well #10 clean and pump replacement

Well Communication Repair



## 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 June 2023.

- 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 is progressing. There was a preconstruction meeting in February. Petersburg Plumbing has pushed back the construction start date.

Meter Project progressing, All meter bases and registers are on site. 13 cell meters have been installed.

### **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 and pumps have been installed
3. BOP CPU upgrade has been completed
4. Second raw water detention tank
5. SSWC/Chatham interconnect











