



# Monthly Operating Report

June:2021

So. Sangamon  
Water Commission  
July 19th, 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 June 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](http://www.sswc.us).

During the month of June 2021, the plant pumped 51.143 million gallons from the well field and 45.486 million gallons of finished water. This is 20 million gallons more than June of 2020.

The SSWC plant has been removed from Critical Review status.

**Operations.** There was 1 emergency call-outs for the month. There were numerous customer inquiry for the month.

**Maintenance and Repair.** For the month of June 2021, there were 30 inspections, 3 preventative and 3 corrective maintenance activity completed.

**Budget.** Passed at April 19<sup>th</sup> 2021 meeting.

### **Capital Planning.**

BOP CPU replacement

Chloramines Project

New Berlin Meter relocation.

Chatham emergency interconnect

# 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 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 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 51.143 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).
<b>Max.</b>	7.5	15.6	2.90	.291	-	386	310	1.995
<b>Min.</b>	7.2	13.9	.02	.161	-	320	280	1.169
<b>Avg.</b>	7.4	14.9	.96	.211	-	359	297	1.705
<b>Total</b>	-	-	-	-	-	-	-	51.143

### 2.3 EFFLUENT CONCENTRATIONS

The facility filtered 45.486 MG during the month with a daily average of 1.516 MG and a min/max .921/ 1.822 MG.

Table 2.3 Finished Water Quality										
	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
<b>Max.</b>	2.04	2.11	7.9		0.05	0.161	1.0	200	300	2.50
<b>Min.</b>	1.19	1.49	7.4		0.01	0.002	0.37	80	270	1.57
<b>Avg.</b>	1.64	1.81	7.8		0.02	0.025	0.72	136	284	1.93
<b>MCL</b>	-	-	-	-	1.00	-	4.00	-	-	-
<b>SMCL</b>	-	-	-	-	0.30	0.050	2.00	-	-	-

## Finished Water Flow Comparison for FY 2020 -21

Time Period	2020-2021	2019-2020	2018-2019
June 2020- May 2021	423,546,630	347,187,763	3387,466,727
Increase for the same period last year		76.3 MG	- 40.2 MG

FINISHED WATER PUMPING HISTORY						
	20-21	19-20	18-19	17-18	16-17	15-16
July	44,237,066	23,742,374	41,178,722	42,164,927	35,378,396	33,123,375
Aug	39,638,063	25,018,633	35,176,238	38,760,634	35,401,490	38,109,133
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
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Totals	423,546,630	347,187,763	387,466,727	390,601,733	394,052,642	384,208,554
Avg	1.15 MGD	.951 MGD	1.06 MGD	1.07 MGD	1.08 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 <sup>2</sup> (mg/l)	pH (S.U.)	TSS (mg/l)
June 8th, 2021						
Minimum	.03	.122	348	.04	7.8	<4
Maximum	.03	.122	348	.04	7.8	< 4
Average	.03	.122	348			<4
<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 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 1 emergency call out for the month.

### 3.3 EMERGENCY CALL-OUTS

There was 1 emergency call out for the month of June

### 3.4 CUSTOMER INQUIRIE

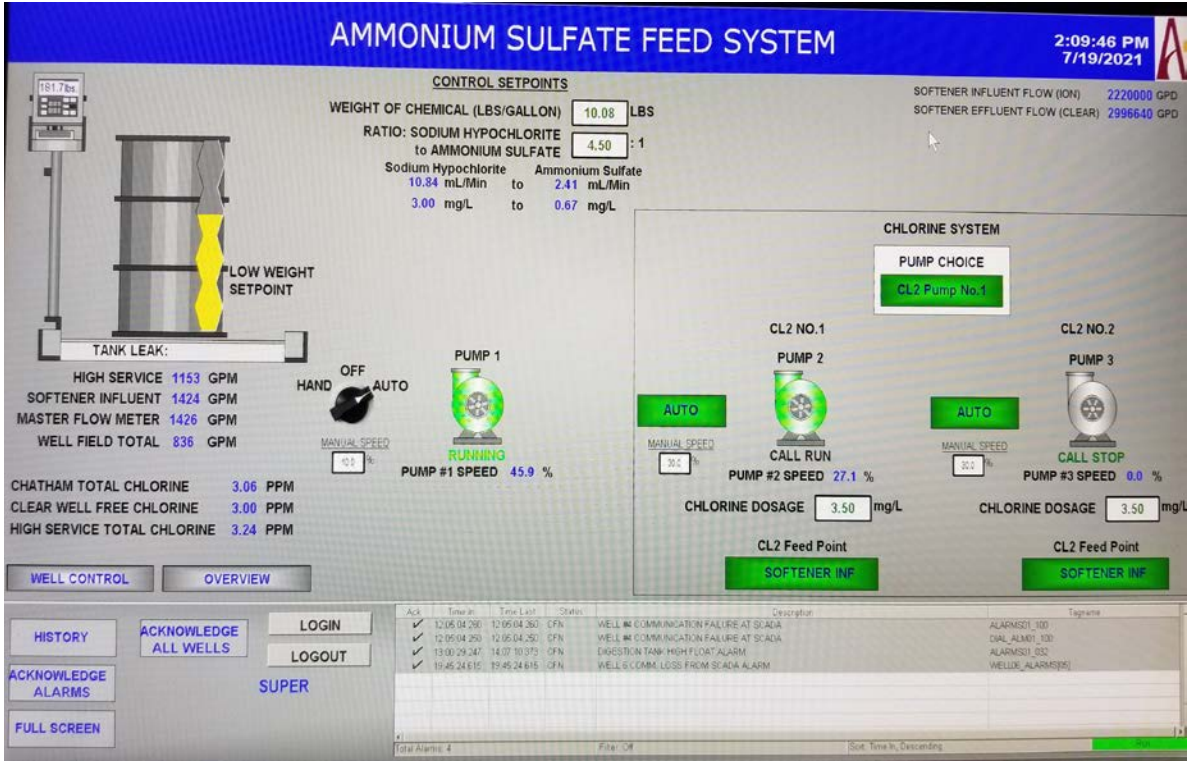
There were numerous customer inquiries.

#### OTHER WORK PERFORMED

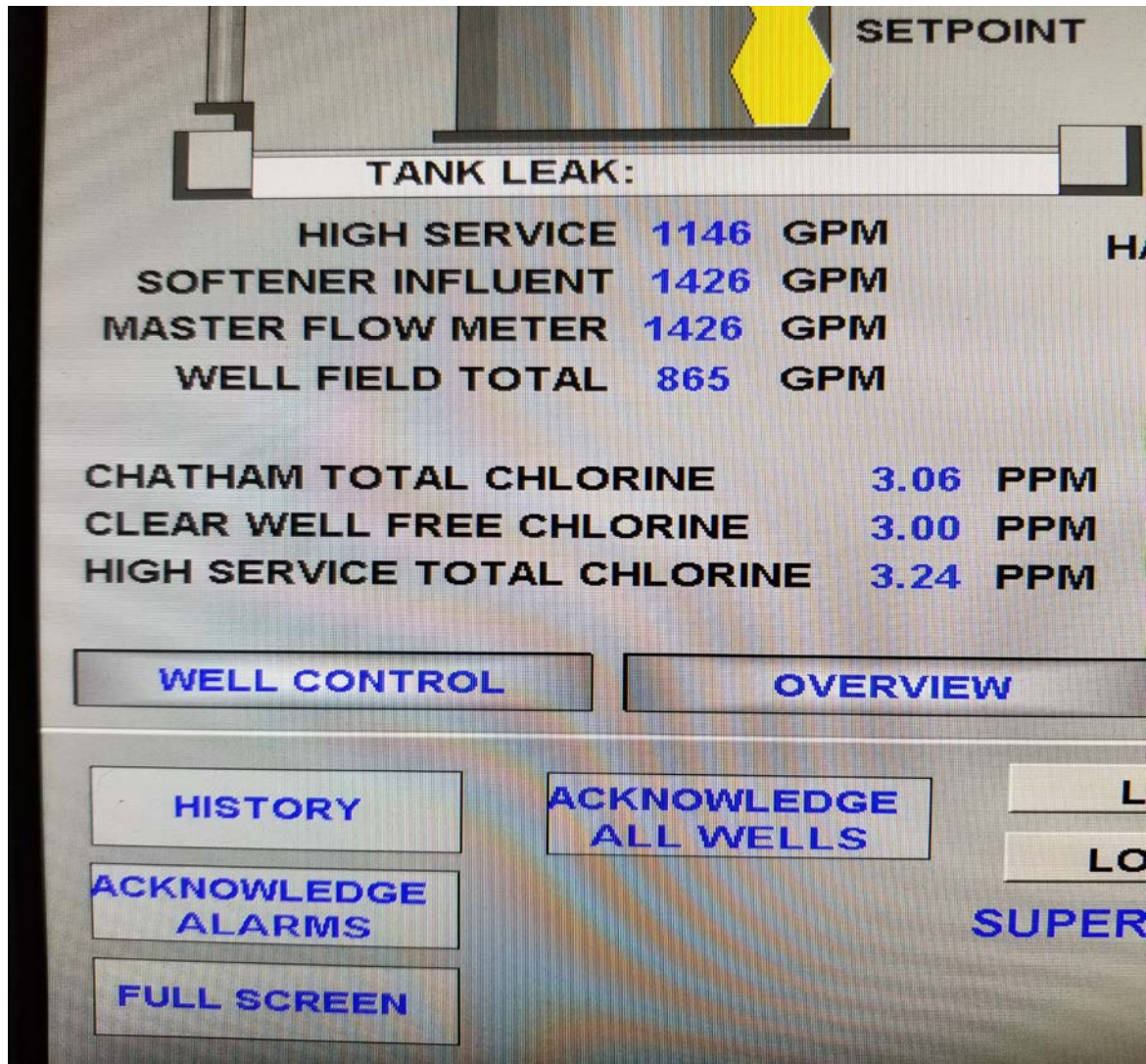
Trouble shooting all trains  
Trouble shooting of CIP skid and CIP procedure  
Inspected distribution mains  
Added to customer info database  
Inspected booster station  
Flushed air system  
Trouble shooting of Ion exchange system  
Replaced ion exchange valve actuator  
Setup VPN  
Replaced comm card in westech HMI



Brotke in the well field pulling a well to begin a clean. Well # 8 was cleaned in June and when completed was brought back to capacity



Ammonium Sulfate feed screen. On this screen staff can see the feed rates of both the ammonium sulfate and the chlorine.



The free chlorine that is used to calculate the ammonium sulfate feed rate and the total chlorine after creating Chloramines.

## 4. MAINTENANCE AND REPAIR

### 4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE

For the month of June 2021, there were 30 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

Worked with SCADAware to setup VPN and remote logins

Purged air control system

## 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 2021.

- Kevin Canham
- Stephen Bivin
- Katie Krall
- Kevin Garman (SCADAware)
- 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. Investigating 2<sup>nd</sup> Toray filter train feasibility
2. Pricing onsite fuel storage tanks to alleviate tax costs and sustainability during emergencies.





