



Monthly Operating Report

November:2020

So. Sangamon
Water Commission
December 21st, 2020

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 November 2020.

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 November 2020, the plant pumped 43.188 million gallons from the well field and 34.277 million gallons of finished water. This is 2.345 million gallons more than November of 2019.

The SSWC plant has been placed on Critical Review status. Systems on Critical Review will be evaluated for sufficient capacity before issuance of water main extension permits. The Critical Review is currently under review.

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 November 2020, there were 30 inspections, 3 preventative and 3 corrective maintenance activity completed.

Budget. Passed at May 18th 2020 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 November 2020.

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 November. 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 43.188 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.	8.5	15.9	2.67	.331	-	370	318	1.958
Min.	7.9	14.4	.49	.203	-	340	270	1.227
Avg.	8.2	15.0	1.03	.244	-	350	283	1.440
Total	-	-	-	-	-	-	-	43.188

2.3 EFFLUENT CONCENTRATIONS

The facility filtered 34.277 MG during the month with a daily average of 1.143 MG and a min/max .979/ 1.639 MG.

Table 2.3 Finished Water Quality										
	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
Max.	2.20	2.37	8.7		0.03	0.069	.83	180	320	4.52
Min.	1.65	1.70	8.4		0.01	0.005	0.30	80	260	.16
Avg.	1.92	2.03	8.5		0.02	0.027	0.64	117	281	1.67
MCL	-	-	-	-	1.00	-	4.00	-	-	-
SMCL	-	-	-	-	0.30	0.050	2.00	-	-	-

Finished Water Flow Comparison for FY 2019-20

Time Period	2019-2020	2018-2019	2017-2018
Dec 2019- Nov 2020	392,017,339	360,182,712	379,581,690
Increase for the same period last year		31.8 MG	- 19.4 MG

FINISHED WATER PUMPING HISTORY						
	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Dec	29,703,954	31,930,000	28,808,037	32,525,530	27,788,637	28,656,869
Jan	30,073,516	28,823,375	30,556,824	30,449,215	28,510,121	30,346,721
Feb	28,797,693	28,625,431	25,617,914	27,373,232	26,095,228	26,336,077
Mar	30,339,298	31,237,000	28,217,699	30,068,363	27,851,811	28,729,919
Apr	31,542,650	28,418,249	27,110,578	29,625,797	29,292,618	29,270,184
May	34,673,848	33,045,927	33,304,196	32,120,873	33,349,391	33,371,016
June	17,414,377	33,460,303	34,040,000	39,931,402	41,541,321	31,092,539
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
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Totals	392,017,339	360,182,712	379,581,690	405,040,897	386,387,357	377,582,752
Avg	1.07 MGD	.987 MGD	1.04 MGD	1.11 MGD	1.06 MGD	1.03 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)
November 9th 2020	.39	.415	390	0.03	8.4	<4
Minimum	.39	.415	390	0.03	8.4	<4
Maximum	.39	.415	390	0.03	8.4	<4
Average	.39	.415	390	0.03	8.4	<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 November 2020. 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 of November

3.4 CUSTOMER INQUIRIE

There were numerous customer inquiries.

OTHER WORK PERFORMED

Trouble shooting of new train

Trouble shooting of CIP skid and CIP procedure

Inspected distribution mains

Consulted with new customers.

Installed Transfer switch

Replaced manifold on train 3

Created customer info database

Inspected booster station



During the month of November Egizzi Electric arrived at the plant with there “crane” to set the newly arrived automatic transfer switch.



Egizzi removing the manual transfer switch and replaced it with the automatic switch



Operators Kevin Canham and Katie Krall replacing an upper manifold on train #3 that was leaking



Operator Kevin Canham replacing a pressure switch on compressor #2



In November, customer John Poffenberger came to the plant to report a leak. After arriving at the sight of the leak it was discovered that, while mowing, the county had struck the cover of the air valve pit.



With the pit cover damaged this allowed the air valve to freeze and burst.



The air valve was removed and a ball valve was installed to stop the flow of water.

4. MAINTENANCE AND REPAIR

4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE

For the month of November 2020, there were 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

Replaced manifold on train #3

Worked with SCADAware in learning our system.

Replaced pressure control switch on compressor #2

5. PROJECT MANAGEMENT & SUPPORT

5.1 STAFFING & TRAINING

- With the addition of a new 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 November 2020.

- Kevin Canham
- Stephen Bivin
- Katie Krall
- Kevin Garman (SCADAware)
- Dan (SCADAware)
- Egizzi Electric

5.3 BUDGET

Table 5.3 Operating Budget

Table 5.3 Budget Table

Budget Category	Month Budget	Month Actual	YTD Budget	YTD Actual	Annual Budget
Labor (D.L. + OH)	\$14,590.81	?	\$81,431	\$71,581	\$171,795
Utilities	\$8,30630		\$40,750	\$40,586	\$97,800
Chemicals	\$22,421.92		\$110,000	\$76,944	\$264,000
Maintenance & Repair	\$13,668.62		\$67,146	\$94,528	\$160,937
Chloride	\$12,979.73		\$65,800	\$61,400	\$157,920
Lab Supplies and Equipment	\$1,856.22		\$9,410	\$6,131	\$22,584
Office Supplies	\$213.04		\$1,080	\$264	\$2,592
Miscellaneous Expenses*	\$		\$?	\$500
Other Operating Costs	\$?	\$	\$6107	\$
Engineering Fees	\$2,547.95		\$12,500	\$5,430	\$30,000
Office Equipment rental	\$65		\$325	\$596	\$780
Locates	\$378.00	0	\$1,890	\$3,730	\$4536
Truck	\$3,287.67	0	\$6,667	\$131	\$40,000
Total	\$80,315.26	\$	\$396,999	\$367,428	\$953,444

*as of September 21th 2020

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.

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.

