



Monthly Operating Report

November: 2019

So. Sangamon
Water Commission
December 16th, 2019

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 2019.

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 2019, the plant pumped 34.709 million gallons from the well field and 31.932 million gallons of finished water. This is .403 million gallons more than November of 2018.

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.

Operations. There were 0 emergency call-outs for the month. There were 3 customer inquiries for the month.

Maintenance and Repair. For the month of November 2019, there were 31 inspections, 3 preventative and 3 corrective maintenance activity completed.

Budget. Passed at May 20th meeting.

Capital Planning. Pigging Project

Chloramines Project

Toray filter Project

New Berlin Meter relocation.

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 2019.

1.3 SAFETY AUDIT

No safety audits to date.

1.4 MISCELLANEOUS SAFETY

No usable Fall Arrestors for aerator on premises

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 34.7 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.	7.70	17.6	1.58	.243	-	364	296	1.874
Min.	7.10	14.2	.39	.184	-	340	270	.000
Avg.	7.57	15.3	.75	.208	-	350	283	1.157
Total	-	-	-	-	-	-	-	34.709

2.3 EFFLUENT CONCENTRATIONS

The facility filtered 36.223 MG during the month with a daily average of 1.184 MG and a min/max 1.012/ 1.704 MG.

Table 2.3 Finished Water Quality										
	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
Max.	1.9	2.11	8.20		0.06	0.047	099	180	300	2.02
Min.	.97	1.11	8.00		0.01	0.003	0.32	100	270	1.49
Avg.	1.5	1.64	8.06		0.02	0.018	0.75	118	283	1.74
MCL	-	-	-	-	1.00	-	4.00	-	-	-
SMCL	-	-	-	-	0.30	0.050	2.00	-	-	-

Finished Water Flow Comparison for FY 2018

Time Period	2018-2019	2017-2018	2016-2017
Dec-Nov 2019	360,182,712	379,581,690	405,040,897
Increase for the same period last year		-19.4 MG	

FINISHED WATER PUMPING HISTORY						
	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14
Dec	31,930,000	28,808,037	32,525,530	27,788,637	28,656,869	32,697,551
Jan	28,823,375	30,556,824	30,449,215	28,510,121	30,346,721	32,499,427
Feb	28,625,431	25,617,914	27,373,232	26,095,228	26,336,077	28,745,378
March	31,237,000	28,217,699	30,068,363	27,851,811	28,729,919	31,217,486
April	28,418,249	27,110,578	29,625,797	29,292,618	29,270,184	31,690,073
May	33,045,927	33,304,196	32,120,873	33,349,391	33,371,016	31,157,411
June	33,460,303	34,040,000	39,931,402	41,541,321	31,092,539	38,462,951
July	23,742,374	41,178,722	42,164,927	35,378,396	33,123,375	38,674,894
Aug	25,018,633	35,176,238	38,760,634	35,401,490	38,109,133	33,748,543
Sept	34,234,782	34,754,000	39,896,986	36,325,215	36,546,171	29,763,075
Oct	30,769,238	30,353,482	33,506,605	34,374,820	34,783,455	28,803,052
Nov	30,877,400	30,464,000	28,617,333	30,478,309	27,217,293	28,426,579
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Totals	360,182,712	379,581,690	405,040,897	386,387,357	377,582,752	389,075,300
Avg	.987 MGD	1.04 MGD	1.11 MGD	1.06 MGD	1.03 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

Lagoon Effluent Results						
Date	Fe (mg/l)	Mn (mg/l)	Chloride (mg/l)	Cl ² (mg/l)	pH (S.U.)	TSS (mg/l)
November 7, 2019	.07	.15	320	.02	8.1	6
Minimum	.07	.15	320	.02	8.1	6
Maximum	.07	.15	320	.02	8.1	6
Average	.07	.15	320	.02	8.1	6
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 2019. The limit for chloride discharge to the sanitary district is 30,000 mg/L.

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3. OPERATIONS

3.1 EVENTS IMPACTING OPERATIONS

There were no incidents impacting plant operations for the month of November.

3.2 EMERGENCY & SERVICE CALLS

Service Calls:

- There were 0 emergency call outs for the month.

3.3 EMERGENCY CALL-OUTS

There was 0 emergency call-out for the month requiring operational personnel at the plant after normal business hours

3.4 CUSTOMER INQUIRIE

OTHER WORK PERFORMED

Learned correct operating procedures for the new filter train
Trouble shooting of new train
Trouble shooting of CIP skid and CIP procedure



Kevin Canham preparing to load automatic transfer switch.



Kevin Canham loading transfer switch for delivery to S&C Electric for inspection.

4. MAINTENANCE AND REPAIR

4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE

For the month of November 2019, 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

5. PROJECT MANAGEMENT & SUPPORT

5.1 STAFFING & TRAINING

- With the addition of a new staff member training has been continuous and ongoing.

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 2019.

- Kevin Canham
- Stephen Bivin
- Dave Wilson (Westech)
- Katie Krall
- Keslee Carson

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)	\$13,909.06	?	\$68,237	\$70,128	\$163,768
Utilities	\$8,306.30		\$40,750	\$36,019	\$97,800
Chemicals	\$22,421		\$110,000	\$74,593	\$264,000
Maintenance & Repair	\$13,668.62		\$67,056	\$56,429	\$160,937*
Chloride	\$13,160		\$65,800	\$58,080	\$157,920
Lab Supplies and Equipment	\$1,918.09		\$9,410	\$5,987	\$22,584
Office Supplies	\$220.14		\$1,080	\$627	\$2,592
Miscellaneous Expenses*	\$41		\$123	?	\$500
Other Operating Costs	\$1,398	?	\$6,990	\$6,107	\$16,776
Engineering Fees	\$2,500		\$7,500	\$5,950	\$30,000
Office Equipment rental	\$65		\$542	\$325	\$780
Locates	\$378	0	\$1,890	\$2,758	\$4,536
Truck	\$3,333	0	\$33,333	\$35,560	\$40,000
Total	\$81,318.21	\$37,337.12	\$377,488	\$349,805	\$962,193

*as of September 30 2019

6. CAPITAL PLANNING

6.1 APPROVED CIP PROJECTS CURRENT STATUS

Toray filter project ; Installation of the filter train began on July 29th and carried on into November although currently installed and running diagnostics and fine tuning is still ongoing.

Chloramine conversion project- all construction is complete. SCADA programming needs fine tuning Hach will commence startup of Monochloramine analyzer in December

New Berlin Meter master meter relocation project is commencing. Awaiting new engineering report and finalized relocation plan.

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.

