



Monthly Operating Report

February 2018



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So. Sangamon

March 20, 2018

woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS

TABLE OF CONTENTS



SECTION	PAGE NO.
Executive Summary.....	ES-1
1. SAFETY	1-1
1.1 Safety Training	1-1
1.2 Lost time Accidents	1-1
1.3 Safety Audit	1-1
1.4 Miscellaneous Safety.....	1-1
2. COMPLIANCE, FLOWS AND LOADINGS	2-2
2.1 Compliance	2-2
2.2 Influent flows and loadings	2-2
2.3 Effluent Concentrations	2-2
2.4 Lagoon Discharge Concentrations	2-3
3. OPERATIONS.....	3-1
3.1 Events impacting operations	3-1
3.2 Emergency & Service calls.....	3-1
3.3 Emergency Call-outs	3-4
3.4 Customer Inquiries	3-5
4. MAINTENANCE AND REPAIR.....	4-6
4.1 Preventative and predictive maintenance.....	4-6
4.2 Corrective repairs	4-6
5. PROJECT MANAGEMENT & SUPPORT.....	5-1
5.1 Staffing & Training.....	5-1
5.2 Corporate Support.....	5-1
5.3 Budget.....	5-2
6. CAPITAL PLANNING	6-1
6.1 Approved CIP Projects Current status.....	6-1
6.2 Draft Capital Improvement Plan	6-1



LIST OF TABLES

TABLE	PAGE NO.
Table 2.2 Influent Concentrations and Flow.....	2-2
Table 2.3 Finished Water Quality.....	2-2
Table 2.4 Weekly Grab Sample Analysis Results.....	2-3
Table 4.1 Budget Table.....	5-2



EXECUTIVE SUMMARY

Safety. Safety is the number one priority at Woodard and Curran. We continue to provide monthly training for operations staff at the plant, provide weekly safety updates and safety videos are assigned to all employees. The safety topic for this month was “Walking/Working Surfaces”. There were no lost time accidents in the month of February 2018. 100 percent of the items identified in the combined list of safety items have been completed.

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 will be available at www.sswc.us once it is completed.

During the month of February 2018, the plant pumped 32.488 million gallons from the well field and 25.617 million gallons of finished water. For the period of May 2017 through February 2018, the plant has pumped 3,066,679 more gallons of water than during the same period one year ago.

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 was 0 emergency call-outs for the month. There were 4 customer inquiries for the month.

Maintenance and Repair. For the month of February 2018, there were 6 inspections, 7 preventative and 0 corrective maintenance activities completed.

Budget. Through February 23, 2018, we are \$9,870 under budget for the fiscal year.

Capital Planning. Woodard and Curran is working with Mecor Engineering to update and prioritize the 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. SAFETY

1.1 SAFETY TRAINING

Woodard and Curran continues to provide safety training for personnel at the plant. This is accomplished by requiring daily safety meetings, weekly safety updates are available to the plant, and safety videos are assigned to all employees and are required to be completed. The February 2018 safety training topic was “Walking/Working Surfaces”.

1.2 LOST TIME ACCIDENTS

There were 0 lost time accidents in the month of February 2018.

1.3 SAFETY AUDIT

Since Woodard and Curran assumed operational responsibility for the SSWC plant, two safety audits have been completed. The first audit was conducted in May 2015 and identified 89 items needing to be addressed. Approximately 86 percent of those items identified had been addressed when a second audit occurred in November 2016.

The finding for these two audits were combined to produce a list of 40 items needing to be addressed. As of November 30, 2017, 100 percent of the items have been addressed.

1.4 MISCELLANEOUS SAFETY

There were no Miscellaneous Safety items for the month.

2. COMPLIANCE, FLOWS AND LOADINGS

2.1 COMPLIANCE

The finished water quality was within regulatory limits and all reporting and sampling requirements were met for February. 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 was 32.488 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 (k)
Max.	7.56	14.3	1.46	0.215	-	370	290	1.483
Min.	7.24	12.6	0.47	0.195	-	340	270	0.777
Avg.	7.37	13.4	0.77	0.205	-	352	282	1.159
Total	-	-	-	-	-	-	-	32.488

2.3 EFFLUENT CONCENTRATIONS

The facility filtered 29.612 MG during the month with a daily average of 1.058 MG and a min/max of 1.351/0.706 MG.

Table 2.3 Finished Water Quality										
	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
Max.	1.3	1.5	7.91	15.6	0.03	0.046	0.98	118	282	1.61
Min.	0.9	1.1	7.58	12.8	0.00	0.004	0.50	100	240	0.74
Avg.	1.2	1.3	7.77	13.7	0.01	0.012	0.76	108	269	1.17
MCL	-	-	-	-	1.00	-	4.00	-	-	-
SMCL	-	-	-	-	0.30	0.050	2.00	-	-	-

Finished Water Flow Comparison for FY 2018

Time Period	2017-2018	2016-2017	2015-2016
May – February	340,162,334	337,095,655	316,641,903
Increase for the same period last year		3,066,679	

FINISHED WATER PUMPING HISTORY						
	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014	2012-2013
May	32,301,672	33,248,127	33,376,051	37,669,726	31,157,411	29,592,356
June	39,931,402	41,541,321	31,092,539	38,462,951	36,530,691	47,120,577
July	42,164,927	35,378,396	33,123,375	38,674,894	40,908,704	57,780,876
August	38,760,634	35,401,490	38,109,033	33,748,543	42,999,243	42,398,528
September	39,896,986	36,325,215	36,546,171	29,763,075	37,597,085	32,510,603
October	33,506,605	34,374,820	34,783,455	28,803,052	33,916,594	30,278,765
November	28,617,333	30,478,309	27,217,293	28,426,579	31,615,459	27,114,479
December	28,808,037	32,525,530	27,788,637	28,656,869	32,697,551	29,014,035
January	30,556,824	30,449,215	28,510,121	30,346,721	32,499,427	28,007,432
February	25,617,914	27,373,232	26,095,228	26,336,077	28,745,378	25,763,807
March		30,068,363	27,851,811	28,729,919	31,217,486	28,130,190
April		29,625,797	29,292,618	29,270,184	31,690,073	27,991,597
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Totals	314,544,420	396,789,815	373,786,332	378,888,590	411,575,102	405,703,245
Average		1,087,095	1,022,702	1,038,051	1,127,603	1,111,516
Maximum		2,061,098	2,177,926	1,837,344	2,010,587	2,546,901
Minimum		275,315	-	349,690	363,767	142,411

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)
02/20/2018	0.490	0.513	215	0.04	7.34	0
Minimum						
Maximum						
Average						
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 of February 2018, performed by the Springfield Metropolitan Sanitary District, was 8,800 mg/L. The limit for chloride discharge to the sanitary district is 30,000 mg/L.

3. OPERATIONS

3.1 EVENTS IMPACTING OPERATIONS

Brine Hauling to village of Chatham. In early January, plant operations staff were contacted by a Chatham resident who was concerned the hauling of the brine waste was not being done correctly. In checking with the Illinois EPA, the waste being hauled from the plant is considered a special waste. This being the case, the plant is required to manifest each load that leaves the plant and the manifest must be signed by the generator (SSWC), the hauler (KAT Trucking) and the receiver (Sangamon County Water Reclamation District). Since the Chatham Water Tower Sewer Inlet is not staffed, the waste must now be hauled directly to the Sangamon County Water Reclamation District.

Other trucks are using this same location for waste hauling. There are times when KAT Trucking must wait in line to unload. This being the case, and since KAT Trucking is paid by the hour, SSWC can expect the cost to haul the Chloride waste from the plant to increase.

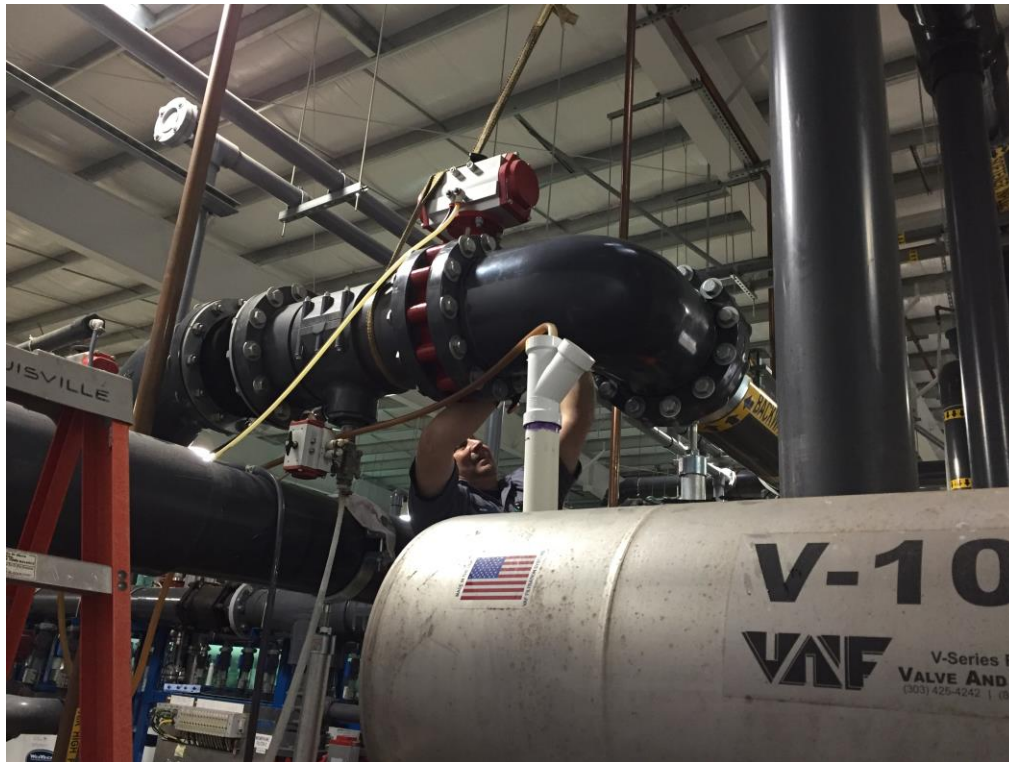
3.2 EMERGENCY & SERVICE CALLS

Service Calls:

- **10" Tee on the Bank #3 Backwash Line.** On February 20, 2018, Henson Robinson was on-site to repair the leak on the Bank #3 Backwash Line. The existing Tee was replaced with a Elbow since expansion of the plant on the south side of the filter system is not possible. Pictured below is the new fitting being installed.



Pictured below is the new fitting that was installed.



With replacement of the Tee on Bank #3, all four fittings have been replaced on the backwash line over the past 12 months. The picture below is the last of the new fittings being installed. The Red Circles indicate the fittings that have been changed.



OTHER WORK PERFORMED

Replacement of Leaking Pipe on the WesTech System. Henson Robinson was on site February 6, 2018 to assist in the replacement of all the lower piping on Bank #1.



Return of the leaking piping to WesTech. Plant operations staff inquired with WesTech as to cause for the leaking piping. Pictured below is the box we shipped the piping back to WesTech for examination.



The yellow circles at the end of the pipe indicate where the leaks were taken place. The piping was returned to WesTech on February 23, 2018.



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 INQUIRIES

There were 4 customer inquiries for the month of February:

- Laura VanProyen requested a meter reading for 7125 Cardinal Hill Road.
- Laura VanProyen requested assistance with a possible leak at 6063 Cardinal Hill Road.
- The Department of the Army requested information on the Well Field piping
- Village of Chatham received a call indicating there was a lot of water on the ground near the New City Road Greenhouse.

Pictured below is the water found on the ground near the greenhouse. A broken water line inside the greenhouse from the cold temperatures was the reason for all the water.





4. MAINTENANCE AND REPAIR

4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE

For the month of February 2018, there were 6 inspections, 7 preventative and 0 corrective maintenance activity completed.

4.2 CORRECTIVE REPAIRS

There were no corrective repairs made this month.

5. PROJECT MANAGEMENT & SUPPORT

5.1 STAFFING & TRAINING

- Woodard and Curran continues to train and provide staffing to the plant as needed. With the resignation of Mr. Keith Sommers, Mr. Stephen Bivin is filling in on a temporary basis.

5.2 CORPORATE SUPPORT

The following individuals, either on-site or remotely, provided assistance in operation and/or maintenance of the plant during the month.

- Marc Thomas
- Jackie Smith
- Ray Giguere
- Stephen Bivin
- Greg Frieden
- Stephanie Crowell
- Shannon Eyler
- Wendy Foreman

5.3 BUDGET

Table 5.3 below is a breakdown of the current budget as of February 23, 2018.

Table 5.3 Budget Table

Budget Category	Month Budget	Month Actual	YTD Budget	YTD Actual	Annual Budget	Over (under)	% of budget
Labor (D.L. + OH)	\$24,213	\$23,010	\$242,126	\$214,970	\$290,551	(\$27,156)	74%
Utilities	\$8,150	\$6,720	\$81,500	\$77,440	\$97,800	(\$4,060)	79%
Chemicals	\$14,583	\$28,837	\$145,833	\$167,610	\$175,000	\$21,777	96%
Maintenance & Repair	\$9,102	\$10,623	\$91,021	\$109,646	\$109,225	\$18,625	100%
Chloride	\$13,522	\$12,913	\$135,217	\$118,357	\$162,260	(\$16,860)	73%
Lab Supplies and Equipment	\$1,882	\$685	\$18,820	\$14,868	\$22,584	(\$3,952)	66%
Office Supplies	\$216	\$421	\$2,155	\$3,815	\$2,586	\$1,660	148%
Miscellaneous Expenses	\$1,141	\$1,206	\$11,413	\$11,590	\$13,695	\$178	85%
Other Operating Costs	\$1,398	\$1,356	\$13,980	\$14,796	\$16,776	\$816	88%
Subtotal of Costs for Contract Year 3	\$74,206	\$85,771	\$742,064	\$733,092	\$890,477	(\$8,972)	82%
Fixed Fee for Contract Year 3	\$7,421	\$8,579	\$74,207	\$73,309	\$89,048	(\$897)	82%
Year One Transition	\$1,366	\$1,366	\$13,658	\$13,658	\$16,389	\$0	83%
Total	\$82,993	\$95,716	\$829,928	\$820,059	\$995,914	(\$9,870)	82%

6. CAPITAL PLANNING

6.1 APPROVED CIP PROJECTS CURRENT STATUS

No new information is available.

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.

The most recent Capital List was included in the Year 2 Annual Report.