

Poughkeepsies' Water Treatment Facility

MEMORANDUM

December 3, 2018

To: Joint Water Board
From: Randy J. Alstadt, P.E.
Water Plant Administrator
Subject: November 2018 Status Report

Water Quality/Production Issues

The November average daily raw water flow was 10.98 MGD compared to 10.70 MGD in October and 10.43 MGD in October 2017. Water quality averaged 0.03 NTU which is slightly better than October 2018. The drinking water maximum contaminant level is 0.30 NTU.

Plant Update

Plant operated well. The solids thickener had 4.5 feet of solids at the end of November which was the same as October 2018. Centrifuge average operating rate was 15.2 gpm compared to 13.4 gpm in October 2018.

Treatment Process Comparison October 2018 vs. November 2018

Parameter	October-18			November-18		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Raw Flow, MGD	10.70	13.59	9.02	10.98	12.61	8.45
Raw Turbidity, NTU	45	120	11	53	190	12
Effluent Turbidity, NTU	0.04	0.08	0.03	0.03	0.05	0.02

Sludge Process Comparison October 2018 vs. November 2018

Parameter	October-18	November-18	Change	
			Quantity	Percent
Residual Solids, gallons	970,979	1,235,162	264,183	27%
Backwash, gallons	2,393,000	1,734,000	(659,000)	-28%
Thickener, gallons	626,171	626,171	776,204	124%
Plate Settler, gallons	22,438	22,438	68,464	305%
Centrifuge #1 gallons	272,753	458,506	185,753	68%
Centrifuge #2 gallons	281,898	344,710	62,812	22%
Centrifuge Total	554,651	803,216	248,565	45%
Centrifuge #1 gpm	13	15	1	10%
Centrifuge #2 gpm	13	16	3	20%
Solids Hauled, tons	387.94	451.00	63	16%
Feed Solids Concentration	6.3	4.0	(2.2)	-36%
Centrifuge #1 Cake percent	27.4	27.2	(0.3)	-1%
Centrifuge #2 Cake percent	27.6	27.4	(0.1)	0%

Our ozone system ran well. Basin #2 remains out of service to reduce liquid oxygen consumption.

The Combined Filter Effluent valve, which was significantly plugged with chemical precipitate, was removed and replaced with a spool piece. The filter operation is now normal. Backwash water was reduced 659,000 gallons resulting in cost savings.

Significant precipitate was removed from the polyaluminum storage tanks. The chemical is now stored in 26 55 gallon drums.

Advanced Testing performed high voltage equipment testing and maintenance.

Five of Six filter effluent turbidity meters were replace as they were no longer supported by the manufacturer. The sixth meter will be replaced in 2019.

Covers on sedimentation basins were removed for the winter.

Upgrade

PLC bid was received October 3rd. City Purchasing obtained a MWBE waiver for Smith Controls the low bidder. Trailer manufacturing is continuing.

RLJ Electric has not agreed to process a change order for their remaining work which will complete their contract. We have been advised the contractor has made no progress. We currently have \$171,533.74 remaining of which \$94,076.12 is retention. Their contract was required to be completed September 19, 2016. By Change Order the contract was extended 344 days adjusting completion date to August 29, 2017. As of December 4th their contract has lapsed is now 462 days. Per contract liquidated damages is \$500/day which currently amounts to \$231,000.

Filter and Disinfection Studies

Tighe Bond has submitted a draft report on the Disinfection Study. We will hold a review meeting December 4th. We anticipate the Filter Study report soon.

Staffing

One of our Maintenance Mechanics continues to be out due to a non work foot injury that occurred in December 2017. His latest Doctor's excuse states he can return Monday, November 19th. The City's Doctor gave Keith a physical Wednesday November 7th to verify Keith's condition. City Doctor determined he was not ready to return to work. The Doctor will see him again December 10, 2018.