

Poughkeepsies' Water Treatment Facility

MEMORANDUM

March 5, 2018

To: Joint Water Board
From: Randy J. Alstadt, P.E.
Water Plant Administrator
Subject: March 2019 Status Report

Water Quality/Production Issues

The March average daily raw water flow was 10.29 MGD compared to 10.63 MGD in February 2019 and 10.55 MGD in March 2018. Water quality averaged 0.03 NTU which is identical to February 2019. The drinking water maximum contaminant level is 0.30 NTU.

Plant Update

Plant operated well. The solids thickener had 2.5 feet of solids at the end of March which was identical to the end of February 2019. Centrifuge average operating rate was 13.0 gpm compared to 11.3 gpm in February 2019.

Treatment Process Comparison February 2019 vs. March 2019

Parameter	February-19			March-19		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Raw Flow, MGD	10.63	12.82	8.79	10.29	12.01	8.69
Raw Turbidity, NTU	45	90	18	29	74	10
Effluent Turbidity, NTU	0.03	0.06	0.03	0.03	0.06	0.02

Sludge Process Comparison February 2019 vs. March 2019

Parameter	Feb-19	Mar-19	Change	
			Quantity	Percent
Residual Solids, gallons	531,304	543,727	12,423	2%
Backwash, gallons	1,370,000	1,300,000	(70,000)	-5%
Thickener, gallons	456,848	376,484	(80,364)	-18%
Plate Settler, gallons	52,657	32,180	(20,477)	-39%
Centrifuge #1 gallons	112,414	285,159	172,745	154%
Centrifuge #2 gallons	232,188	232,188	131,893	57%
Centrifuge Total	344,602	517,347	172,745	50%
Centrifuge #1 gpm	12.3	13.7	1.4	11%
Centrifuge #2 gpm	10.4	12.3	2.0	19%
Solids Hauled, tons	197.48	179.09	(18)	-9%
Feed Solids Concentration	7.2	6.1	(1.0)	-14%
Centrifuge #1 Cake percent	31.9	32.1	0.2	1%
Centrifuge #2 Cake percent	28.5	31.5	3.1	11%

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

Filters ran well. Average filter runs have returned to prior upgrade. Filter runs in 2019 have averaged 21,000 gallons/ft².

High Lift Pump Number 1 is producing unusual noise. Vibration, temperature and oil levels were found to be within specification. Troy Motor service has been called in to investigate further.

Upgrade

Trailer manufacturing is continuing.

PLCs are now being constructed by Smith Controls.

Low Lift Motor #4 was returned to service after additional testing to eliminate possible control issues as cause for failure.

Filter and Disinfection Studies

A presentation on need to replace UV disinfection was presented to Town Board. Presentation was well received.

Staffing

We interviewed 8 applicants. City reopened advertisement for City employees only until April 4th. Once position is closed we will interview other applicants. We expect to hire in April

Hudson River Safety, Navigation & Operations Committee

I was appointed as a voting member to the Committee. I will have the opportunity to ensure issues that could affect water quality are fully evaluated and communicated.