

Poughkeepsies' Water Treatment Facility

MEMORANDUM

February 3, 2018

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

Water Quality/Production Issues

The January average daily raw water flow was 10.63 MGD compared to 10.43 MGD in January and 10.65 MGD in February 2018. Water quality averaged 0.03 NTU which is identical to January 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 February which was identical to the end of January 2019. Centrifuge average operating rate was 11.3 gpm compared to 14.5 gpm in January 2019.

Treatment Process Comparison January 2019 vs. February 2019

Parameter	January-19			February-19		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Raw Flow, MGD	10.43	12.05	8.99	10.63	12.82	8.79
Raw Turbidity, NTU	31	93	14	45	90	18
Effluent Turbidity, NTU	0.03	0.08	0.02	0.03	0.06	0.03

Sludge Process Comparison December 2018 vs. January 2019

Parameter	Jan-19	Feb-19	Change	
			Quantity	Percent
Residual Solids, gallons	840,188	531,304	(308,884)	-37%
Backwash, gallons	1,368,000	1,370,000	2,000	0%
Thickener, gallons	549,446	456,848	(92,598)	-17%
Plate Settler, gallons	60,022	52,657	(7,365)	-12%
Centrifuge #1 gallons	386,087	112,414	(273,673)	-71%
Centrifuge #2 gallons	232,188	232,188	-	0%
Centrifuge Total	618,275	344,602	(273,673)	-44%
Centrifuge #1 gpm	14.7	12.3	(2.4)	-17%
Centrifuge #2 gpm	14.7	10.4	(4.4)	-30%
Solids Hauled, tons	287.96	197.48	(90)	-31%
Feed Solids Concentration	8.1	7.2	(0.9)	-12%
Centrifuge #1 Cake percent	30.3	31.9	1.6	5%
Centrifuge #2 Cake percent	31.6	28.5	(3.1)	-10%

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

Filters ran well. Average filter runs have dropped compared to December 2018. Average Filter Run volumes in February 2019 were 20,302 gallon/ft² compared to 16,200 gallons /ft² in January 2019.

Upgrade

A preconstruction meeting was held with Smith Controls February 5, 2019. Armani visited site of supplier February 14th to verify compliance. Trailer manufacturing is continuing.

Low Lift Pump #1 was repaired, reinstalled and returned to operation.

Low Lift Motor #4 was repaired. Motor is being held for additional control testing to determine cause of failure.

Filter and Disinfection Studies

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

Staffing

We received applications for our open Maintenance Mechanic position. We expect to conduct interviews and select a replacement in March.

I was on vacation February 7 through March 1st. Al Losee covered during that period. Brian Morris attended Town Board meeting to introduce our consultant.