

# Poughkeepsies' Water Treatment Facility

## MEMORANDUM

May 1, 2020

**To:** Joint Water Board  
**From:** Randy J. Alstadt  
Water Plant Administrator  
**Subject:** May 2020 Status Report

### Water Quality/Production Issues

The May average daily raw water flow was 11.13 MGD which was 0.98 MGD greater than April 2020 and 0.66 MGD greater than May 2019. Water quality averaged 0.06 NTU which is slightly greater than April 2020 which was 0.04 NTU. The drinking water maximum contaminant level is 0.30 NTU.

### Plant Update

Plant operated very well. Raw water turbidity remained low at an average of 35 NTU allowing us to better maintain the solids handling process. The solids thickener was at 1.5 feet of solids at the end of April which was 1.5 foot less than the end of April.

#### Treatment Process Comparison April 2020 vs. May 2020

Parameter	April-20			May-20		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Raw Flow, MGD	10.16	14.01	6.74	11.13	14.34	7.48
Raw Turbidity, NTU	30	94	9	35	161	10
Effluent Turbidity, NTU	0.04	0.06	0.04	0.06	0.09	0.04

#### Sludge Process Comparison April 2020 vs. May 2020

Parameter	Apr-20	May-20	Change	
			Quantity	Percent
Residual Solids, gallons	932,942	1,218,911	285,969	31%
Backwash, gallons	1,576,000	2,604,000	1,028,000	65%
Thickener, gallons	820,384	830,679	10,295	1%
Plate Settler, gallons	37,082	44,908	7,826	21%
Centrifuge #1 gallons	450,262	482,784	32,522	7%
Centrifuge #2 gallons	364,370	461,161	96,791	27%
Centrifuge Total	814,632	943,945	129,313	16%
Centrifuge #1 gpm	21.8	27.7	5.9	27%
Centrifuge #2 gpm	22.6	28.2	5.6	25%
Solids Hauled, tons	259.65	403.76	144.1	56%
Feed Solids Concentration	3.7	3.8	0.1	4%
Centrifuge #1 Cake percent	27.2	26.9	(0.3)	-1%
Centrifuge #2 Cake percent	27.2	26.8	(0.5)	-2%

UPS #2 failed repeatedly. We have determined that the failure occurs during backwash startup when filters #3 and #2 are in service. A Schneider Technician is

schedule to perform deeper analysis on June 1<sup>st</sup>.

Ozone system worked well.

Filters ran well. Filter runs in May were 15,300 gal/ft<sup>2</sup> compared 18,000 in March. The decrease reflects UPS failures and troubleshooting at the end of May.

Low Lift Pump #2 was returned to service and is operating well. Parts for upgrade have not been acquired.

Basin #3 was drained, sludge removed, maintenance performed and returned to service. This activity increased sludge processing and disposal by 56%  
Disinfection Byproduct Testing took place in May. Results were as follows:

Location	THM (standard 80 µg/L)			HAA, (standard 60 µg/L)		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Plant Effluent	5.9			5.1		
City Distribution	30.3	32.8	30.6	17.6	19.4	16.2
Town Distribution	42.7	49.8	32.6	19.6	21.7	19.3

*City and Town data are based upon test site locational running annual average.*

### **UV Replacement**

Specifications for the new UV units are being reviewed. We expect to receive bids in early July.

### **Upgrade**

Trailer manufacturing is continuing. Construction has been delayed further. Our first trailer has not been received.

PLCs are now complete. Armani making additional changes. State Health has stated that they will approve once updated complete package is provided. Expect to bid in June.

### **COVID 19**

We continue to follow strict safety procedures to avoid being infected. Operators and maintenance employees follow social distance rules or when necessary wear masks. The main gate is kept closed. All visitors are screened and permitted to work in isolation. All employees have been provided personal protection equipment (PPE) and disinfectant solutions. HEPA filters have been placed in the laboratory, main control room, sludge plant control room and maintenance shop. Deliveries are taken at the loading deck and disinfected.