

# Poughkeepsies' Water Treatment Facility

## MEMORANDUM

July 1, 2018

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

### Water Quality/Production Issues

The May average daily raw water flow was 10.47 MGD compared to 10.43 MGD in April 2019 and 11.03 MGD in May 2018. Water quality averaged 0.05 NTU which is 0.01 NTU greater than May 2019. The drinking water maximum contaminant level is 0.30 NTU.

### Plant Update

Plant operated well. The solids thickener had 8.0 feet of solids at the end of June compared to 6.5 feet at the end of May 2019. Centrifuge average operating rate was 11.6 gpm compared to 0.9 gpm in May 2019.

#### Treatment Process Comparison May 2019 vs. June 2019

Parameter	May-19			June-19		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Raw Flow, MGD	10.47	11.27	8.52	10.47	11.27	8.52
Raw Turbidity, NTU	51	185	12	42	134	10
Effluent Turbidity, NTU	0.04	0.07	0.03	0.05	0.11	0.03

#### Sludge Process Comparison May 2019 vs. June 2019

Parameter	May-19	Jun-19	Change	
			Quantity	Percent
Residual Solids, gallons	962,270	786,316	(175,954)	-18%
Backwash, gallons	1,523,000	1,812,000	289,000	19%
Thickener, gallons	322,631	380,099	57,468	18%
Plate Settler, gallons	23,945	56,031	32,086	134%
Centrifuge #1 gallons	250,679	226,890	(23,789)	-9%
Centrifuge #2 gallons	322,884	171,280	(151,604)	-47%
Centrifuge Total	573,563	398,170	(175,393)	-31%
Centrifuge #1 gpm	13.0	11.7	(1.3)	-10%
Centrifuge #2 gpm	13.4	11.5	(1.9)	-14%
Solids Hauled, tons	401.84	394.22	(7.6)	-2%
Feed Solids Concentration	6.2	6.8	0.7	11%
Centrifuge #1 Cake percent	32.5	31.6	32.2	99%
Centrifuge #2 Cake percent	32.8	32.2	(0.5)	-2%

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 June were 15,049 gal/ft<sup>2</sup> compared to May 2019 which was 19,978 gallons/ft<sup>2</sup>. This is a reduction of 2.5 percent. It appears this is being caused by increased raw water temperature resulting in greater bio-growth in the filters.

Maintenance is continuing change out the sodium hypochlorite pumps.

Low Lift Pump #4 failed and is schedule to be returned in early July. We negotiated price down 50% from \$33,758 to \$16,879.

Central Hudson conducted a dye test in Hudson River. We were not impacted nor have we received report.

### **Upgrade**

Trailer manufacturing is continuing. We expect first trailer to be delivered in August 2019.

PLCs are now being constructed by Smith Controls. Projected completion date is August 2019. Installation documents are complete and being reviewed by State Health. Project is expected to be completed in early 2020.

### **UV Replacement**

City and Town are establishing funding for project.

### **Staffing**

Operation Specialist, Art Ziemins, has advised will be retiring effective July 30<sup>th</sup>.