

# ***Poughkeepsies' Water Treatment Facility***

## **MEMORANDUM**

July 6, 2017

**To:** Joint Water Board  
**From:** Randy J. Alstadt, P.E.  
Water Plant Administrator  
**Subject:** July 2017 Status Report

### **Water Quality/Production Issues**

Process data for June 2017 and July 2017 are presented in the following tables. July Average Daily Flow was less than June by 0.08 MGD. July 2017 demand was 0.23 MGD greater than July 2016. Quality was excellent. Plant effluent turbidity averaged 0.07 NTU while influent turbidity averaged 52 NTU (99.9% reduction).

#### **Treatment Process Comparison June 2017 vs. July 2017**

Parameter	June-17			July-17		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Raw Flow, MGD	11.08	12.29	9.18	11.00	12.50	8.72
Raw Turbidity, NTU	41	129	10	52	199	10
Effluent Turbidity, NTU	0.07	0.11	0.06	0.07	0.11	0.06

#### **Sludge Process Comparison June 2017 vs. July 2017**

Parameter	June-17	July-17	Change	
			Quantity	Percent
Residual Solids, gallons	1,077,008	1,412,890	335,882	31%
Backwash, gallons	1,711,000	1,711,000	3,312,000	194%
Thickener, gallons	334,398	334,398	351,397	105%
Plate Settler, gallons	26,178	26,178	22,400	86%
Centrifuge #1 gallons	202,555	146,000	351,397	173%
Centrifuge #2 gallons	181,909	290,000	22,400	12%
Centrifuge Total	384,464	436,000	373,797	97%
Centrifuge #1 gpm	14	14	13	93%
Centrifuge #2 gpm	13	13	13	100%
Solids Hauled, tons	302.89	302.89	330	109%
Feed Solids Concentration	7.0	9.6	2.5	36%
Centrifuge #1 Cake percent	33.1	33.9	0.8	2%
Centrifuge #2 Cake percent	32.3	34.7	2.4	7%

Data Through July 30, 2017. Totals are projection.

### **Plant Update**

Plant operated well. The solids thickener had 8.5 feet of solids at the end of July (3.5 feet greater than June). Centrifuge operating rate of 13 gpm. Centrifuge feed solids concentration average 9.6-percent solids which limits centrifuge feed rate.

Low Lift #4 was returned and installed July 18<sup>th</sup>. Currently, all 4 Low Lift pumps were repaired and are in good working order.

Our ozone system is working well and the filters are now working in the biological operation mode.

Filter run lengths were significantly less than previous years. It was determined that the low flow rate due to operating all filters was the cause. Filter #1 has been removed from service and will remain out of service until needed. Filter run lengths have increased.

We have installed a chlorine analyzer at the College Hill Reservoir that samples the water 18-inches below the operating surface. We are currently installing telemetry to provide continuous recording in our Control Room.

### **Staffing**

Sara Holmes needs to complete a laboratory class before she can obtain the Grade 2A Water Operator License. She is scheduled to take this course August 9<sup>th</sup>.

Shane Hunt took the Rural Water Operator Course Final Examination in July. Upon passing he will be able to obtain the Grade 2A Water Operator License.

### **Upgrade**

The design for the PLC upgrade was complete and submitted to State Health for approval. We are currently waiting approval prior to bidding

EFC approved manufacture of trailers and advised that MWBE requirements would not be necessary and that US steel is not necessary. Converto, the low bidder in 2015, has agreed to keep his bid price and was given a Purchase Order and Notice to Proceed.

Progress on the PaCl feed pumps are moving forward but not complete. This is not necessary for Ozone operation. This is part of work our staff is to perform.