

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

## **MEMORANDUM**

October 2, 2020

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

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

The September average daily raw water flow was 11.75 MGD which was 0.29 MGD less than August 2020 and 0.03 MGD less than September 2019. Water quality averaged 0.04 NTU which is slightly less than July 2020 which was 0.05 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 24 NTU allowing us to better maintain the solids handling process. At the end of September the solids thickener was at 4.0 feet of solids which was the same at the end of August.

#### **Treatment Process Comparison August 2020 vs. September 2020**

Parameter	August-20			September-20		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Raw Flow, MGD	12.04	15.74	8.71	11.75	15.88	8.30
Raw Turbidity, NTU	25	65	7	24	89	8
Effluent Turbidity, NTU	0.05	0.22	0.04	0.04	0.07	0.04

#### **Sludge Process Comparison August 2020 vs. September 2020**

Parameter	Aug-20	Sep-20	Change	
			Quantity	Percent
Residual Solids, gallons	1,320,644	1,058,323	(262,321)	-19.9%
Backwash, gallons	2,533,000	2,148,000	(385,000)	-15.2%
Thickener, gallons	332,863	364,154	31,291	9.4%
Plate Settler, gallons	24,996	17,069	(7,927)	-31.7%
Centrifuge #1 gallons	174,691	246,215	71,524	40.9%
Centrifuge #2 gallons	254,149	218,318	(35,831)	-14.1%
Centrifuge Total	428,840	464,533	35,693	8.3%
Centrifuge #1 gpm	29.8	14.7	(15.0)	-50.5%
Centrifuge #2 gpm	14.0	12.9	(1.1)	-7.9%
Solids Hauled, tons	308.52	275.16	(33.4)	-10.8%
Feed Solids Concentration	6.6	6.6	0.0	0.5%
Centrifuge #1 Cake percent	25.6	25.9	0.4	1.4%
Centrifuge #2 Cake percent	25.2	26.7	1.5	5.8%

High Lift Pump valve operator was replaced due to multiple failures..

Ozone system worked well

Filters ran well. Filter runs in September were 14,082 gal/ft<sup>2</sup> compared 15,478 gal/ft<sup>2</sup> in August.

Low Lift Pumps are operating well. Low Lift #1 pump was transported to shop for planned upgrade modifications. We expect it to be returned in October.

The Total Suspended Solids Tank was drained for maintenance inspection. Due to heavy solids build up it was not possible to remove all the solids through the centrifuges. Tom Colgan and Franco Zani of the Town assisted staff by pumping solids out.

### **UV Replacement**

Atlantium has completed their modeling of the new UV units. We are awaiting DOH approval prior to completing design. Project is on schedule.

### **Upgrade**

Trailer manufacturing is continuing. Our first trailer is now expected in October with the second trailer to be delivered in the fall.

The PLC bid was canceled as it was found to have insufficient details. The project will be put out to bid again in October.

### **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.