

Poughkeepsies' Water Treatment Facility

MEMORANDUM

November 2, 2020

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

Water Quality/Production Issues

The October average daily raw water flow was 11.07 MGD which was 0.68 MGD less than September and 0.18 MGD greater than October 2019. Water quality averaged 0.04 NTU which is identical to September 2020. 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 23 NTU allowing us to better maintain the solids handling process. At the end of October the solids thickener was at 0.5 feet of solids which was 2.5 feet less than September.

Treatment Process Comparison September 2020 vs. October 2020

Parameter	September-20			October-20		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Raw Flow, MGD	11.75	15.88	8.30	11.07	13.75	9.37
Raw Turbidity, NTU	24	89	8	23	61	7
Effluent Turbidity, NTU	0.04	0.07	0.04	0.04	0.05	0.04

Sludge Process Comparison September 2020 vs. October 2020

Parameter	Sep-20	Oct-20	Change	
			Quantity	Percent
Residual Solids, gallons	1,058,323	1,009,943	(48,380)	-4.6%
Backwash, gallons	2,148,000	1,992,000	(156,000)	-7.3%
Thickener, gallons	364,154	485,407	121,253	33.3%
Plate Settler, gallons	17,069	30,842	13,773	80.7%
Centrifuge #1 gallons	246,215	210,331	(35,884)	-14.6%
Centrifuge #2 gallons	218,318	210,331	(7,987)	-3.7%
Centrifuge Total	464,533	420,662	(43,871)	-9.4%
Centrifuge #1 gpm	14.7	15.4	0.7	4.5%
Centrifuge #2 gpm	12.9	20.3	7.4	57.7%
Solids Hauled, tons	275.16	289.74	14.6	5.3%
Feed Solids Concentration	6.6	5.2	(1.5)	-22.1%
Centrifuge #1 Cake percent	25.9	24.8	(1.2)	-4.5%
Centrifuge #2 Cake percent	26.7	24.0	(2.7)	-10.0%

Low Lift Pump #1 is being rebuilt by supplier. We expect it to be retuned the second week of November. This is the first of the four pumps that will be upgraded at no

cost by manufacturer.

Ozone system worked well

We have been having multiple UV failures that continue to be under investigation.

UV Replacement

We received DOH approval for Atlantium UV contactors. Final design is in progress. We are awaiting DOH approval prior to completing design. Project is on schedule.

Upgrade

The first trailer is now complete, however, travel restrictions have prevented pickup. Trailer #2 should be completed by year end.

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

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. We are investigating installing UV ceiling lights for disinfection in highly occupied rooms including Main Control Room, Sludge Plant Control Room and Board Room.

Laboratory Upgrade

Maintenance completed expansion of our laboratory to add space for the Gas Chromatograph / Mass Spectrophotometer (GC/MS). New GC/MS was installed and training conducted. Testing is now available on demand.