

Poughkeepsies' Water Treatment Facility

MEMORANDUM

July 1, 2020

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

Water Quality/Production Issues

The June average daily raw water flow was 13.02 MGD which was 1.89 MGD greater than May 2020 and 2.55 MGD greater than June 2019. Water quality averaged 0.04 NTU which is slightly greater than May 2020 which was 0.06 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 26 NTU allowing us to better maintain the solids handling process. The solids thickener was at 4.0 feet of solids at the end of June which was 2.5 foot greater than the end of May.

Treatment Process Comparison May 2020 vs. June 2020

Parameter	May-20			June-20		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Raw Flow, MGD	11.13	14.34	7.48	13.02	16.12	8.55
Raw Turbidity, NTU	35	161	10	26	105	8
Effluent Turbidity, NTU	0.06	0.09	0.04	0.04	0.08	0.03

Sludge Process Comparison May 2020 vs. June 2020

Parameter	May-20	Jun-20	Change	
			Quantity	Percent
Residual Solids, gallons	1,218,911	1,206,891	(12,020)	-1%
Backwash, gallons	2,604,000	2,540,000	(64,000)	-2%
Thickener, gallons	830,679	542,063	(288,616)	-35%
Plate Settler, gallons	44,908	62,285	17,377	39%
Centrifuge #1 gallons	482,784	354,375	(128,409)	-27%
Centrifuge #2 gallons	461,161	290,562	(170,599)	-37%
Centrifuge Total	943,945	644,937	(299,008)	-32%
Centrifuge #1 gpm	27.7	19.6	(8.1)	-29%
Centrifuge #2 gpm	28.2	18.6	(9.6)	-34%
Solids Hauled, tons	403.76	333.02	(70.7)	-18%
Feed Solids Concentration	3.8	5.1	1.3	33%
Centrifuge #1 Cake percent	26.9	26.2	(0.7)	-3%
Centrifuge #2 Cake percent	26.8	25.7	(1.1)	-4%

Solids Contactor and Sedimentation Basin #1 was drained preventive maintenance performed and returned to service.

Ozone system worked well.

Filters ran well. Filter runs in June were 13,663 gal/ft² compared 15,300 gal/ft² in May. The decrease reflects increased water temperature.

Low Lift Pumps are operating well. Parts for upgrade have not been acquired. Parts expected in July or late August

UV Replacement

Bid for the new UV units are to be received. Bids are to be received July 15th.

Upgrade

Trailer manufacturing is continuing. Construction has been delayed further. Our first trailer is now expected in August with the second trailer to be delivered in the fall.

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 July.

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.