

Poughkeepsies' Water Treatment Facility

MEMORANDUM

August 2, 2018

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

Water Quality/Production Issues

The July average daily raw water flow was 12.04 MGD compared to 10.47 MGD in June 2019 and 11.96 MGD in July 2018. Water quality averaged 0.04 NTU which is 0.01 NTU less than June 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 June 2019 vs. July 2019

Parameter	June-19			July-19		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Raw Flow, MGD	10.47	11.27	8.52	12.04	14.84	10.09
Raw Turbidity, NTU	42	134	10	37	141	9
Effluent Turbidity, NTU	0.05	0.11	0.03	0.04	0.11	0.03

Sludge Process Comparison June 2019 vs. July 2019

Parameter	Jun-19	Jul-19	Change	
			Quantity	Percent
Residual Solids, gallons	786,316	776,672	(9,644)	-1%
Backwash, gallons	1,812,000	1,756,000	(56,000)	-3%
Thickener, gallons	380,099	430,186	50,087	13%
Plate Settler, gallons	56,031	26,800	(29,231)	-52%
Centrifuge #1 gallons	226,890	218,182	(8,708)	-4%
Centrifuge #2 gallons	171,280	215,267	43,987	26%
Centrifuge Total	398,170	433,449	35,279	9%
Centrifuge #1 gpm	11.7	10.8	(0.9)	-7%
Centrifuge #2 gpm	11.5	10.6	(0.9)	-8%
Solids Hauled, tons	394.22	404.96	10.7	3%
Feed Solids Concentration	6.8	7.4	0.6	8%
Centrifuge #1 Cake percent	31.6	29.8	1.8	6%
Centrifuge #2 Cake percent	32.2	30.5	(1.8)	-5%

Our ozone system shut down multiple times. A service Technician from Suez was brought on site to troubleshoot. Generators were returned to service that day. Generators were taken out of service July 29th for cleaning by Suez Technicians.

Ozone Basin #2 was returned to service and Basin #1 was taken out of service.

Filters ran well. Average filter runs have returned to prior upgrade. Filter runs in June were 16,867 gal/ft² compared to June 2019 which was 15,049 gallons/ft².

Maintenance is continuing change out the sodium hypochlorite pumps.

UPS Batteries and Capacitors were replaced.

Plant was shut down twice for 4 hours each as directed for Energy Curtailment program. Both shutdowns went efficiently with no impact on water quality or customer service.

Low Lift Pump #4 was returned to service.

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, retired effective July 30th.