

Poughkeepsies' Water Treatment Facility

MEMORANDUM

May 2, 2018

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

Water Quality/Production Issues

The April average daily raw water flow was 10.43 MGD compared to 10.29 MGD in March 2019 and 10.97 MGD in April 2018. Water quality averaged 0.05 NTU which is 0.02 NTU greater than March 2019. The drinking water maximum contaminant level is 0.30 NTU.

Plant Update

Plant operated well. The solids thickener had 7.0 feet of solids at the end of April compared to 2.5 feet at the end of March 2019. Centrifuge average operating rate was 10.9 gpm compared to 13.0 gpm in March 2019.

Treatment Process Comparison March 2019 vs. April 2019

Parameter	March-19			April-19		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Raw Flow, MGD	10.29	12.01	8.69	10.43	12.01	8.69
Raw Turbidity, NTU	29	74	10	49	359	11
Effluent Turbidity, NTU	0.03	0.06	0.02	0.05	0.07	0.03

Sludge Process Comparison March 2019 vs. April 2019

Parameter	Mar-19	Apr-19	Change	
			Quantity	Percent
Residual Solids, gallons	543,727	774,536	230,809	#DIV/0!
Backwash, gallons	1,300,000	1,298,000	(2,000)	0%
Thickener, gallons	376,484	340,258	(36,226)	-3%
Plate Settler, gallons	32,180	21,607	(10,573)	-3%
Centrifuge #1 gallons	285,159	253,581	(31,578)	-9%
Centrifuge #2 gallons	131,893	131,252	(641)	0%
Centrifuge Total	417,052	384,833	(32,219)	-24%
Centrifuge #1 gpm	13.7	12.1	(1.6)	0%
Centrifuge #2 gpm	12.3	9.6	(2.8)	-20%
Solids Hauled, tons	179.09	274.54	95.5	774%
Feed Solids Concentration	6.1	6.2	0.0	0%
Centrifuge #1 Cake percent	32.1	32.5	0.4	6%
Centrifuge #2 Cake percent	31.5	34.5	3.0	9%

Our ozone system ran well. Basin #2 remains out of service to reduce liquid oxygen consumption.

Filters ran well. Average filter runs have returned to prior upgrade. Filter runs in 2019 have averaged 21,000 gallons/ft².

High Lift Pump was tested by Troy Motor Service and found to be in good working condition.

Maintenance is changing out the sodium hypochlorite pumps.

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 need to be bid. Project is expected to be completed in early 2020.

Sedimentation basin covers were installed.

UV Replacement

A presentation on need to replace UV disinfection was presented to City Council. Presentation was well received.

Application for funding was submitted to NY State Department of Health. Project will be listed in the 2020 Intended Use Plan (IUP).

Staffing

Interviews were conducted for 10 candidates. Selected candidate is required to pass a physical and drug testing which will be completed in May.