Poughkeepsies' Water Treatment Facility

MEMORANDUM

January 3, 2013

To: Joint Water Board

From: Randy J. Alstadt, P.E.
Water Plant Administrator

Subject: **December 2013 Status Report**

Water Quality/Production Issues

Process data for November 2013 and December 2013 are presented in the following tables. Average Daily Flow down 0.29 MGD (3.2 percent) in 2013 compared to November 2013. Quality was excellent. Plant effluent turbidity averaged 0.05 NTU while influent turbidity averaged 45 NTU (99.9% reduction).

Treatment Process Comparison November 2013 vs. December 2013

Parameter	November-13			December-13		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Raw Flow, MGD	8.95	13.40	4.99	8.66	11.82	5.14
Raw Turbidity, NTU	45	152	13	58	89	30
Effluent Turbidity, NTU	0.04	0.06	0.03	0.05	0.07	0.04

Sludge Process Comparison November 2013 vs. December 2013

Parameter	November-13	December-13	Change	
			Quantity	Percent
Residual Solids, gallons	835,274	785,901	(49,373)	-6%
Backwash, gallons	2,383,000	1,444,000	(939,000)	-39%
Thickener, gallons	142,040	215,397	73,357	52%
Plate Settler, gallons	11,716	13,287	1,571	13%
Centrifuge #1 gallons	27,902	114,158	86,256	309%
Centrifuge #2 gallons	109,353	117,278	7,925	7%
Centrifuge Total	137,255	231,436	94,181	69%
Centrifuge #1 gpm	4.0	5.2	5.2	131%
Centrifuge #2 gpm	4.7	4.7	5.1	108%
Solids Hauled, tons	179.63	179.63	-	0%

Plant Update

Plant operated well.

As of December 31st the solids thickener solids level was at 15.0 feet, 5.0 feet greater than November 30th. The increase was due to large amount of vacation days taken by operators in December. We continue to closely monitor levels and encourage overtime when level exceeds 10 feet.

Both centrifuges operated well. Total production from centrifuges was increased 94,181 gallons or 69 percent. Solids increase was due to increased chemical

telephone (845) 451-4173 x 2003 *fax (845) 451-4175*
e-mail: ralstadt@pokwater.com

dosage and increased turbidity.

Pipe Gallery became extremely wet from condensation do to drastic temperature change. Matting was installed to prevent tripping.

Trac-vac pump rotor was replaced with a re-chromed rotor. A new rotor was quoted by the pump manufacturer at $5,694. The re-chrome rotor was $1,750. We have used re-chromed rotors in the past & had good results.

Muffin Monster to #1 centrifuge was rebuilt.

Centrifuge #2 vibrations were found to be increasing. Feed zones were found heavily clogged. Considerable time was spent attempting to unclog. Feed zones are difficult to reach easily to remove any debris. They are in the middle of the machine & are only reachable by a customized pressure washer wand. The zones were eventually cleared. The machine was returned to service without significant interruption to operations.

#2 filter drain valve actuator would not close during a wash cycle. It was determined the actuator drive was badly worn. Drive was replaced, however actuator remains problematic. We have arranged for repair technician to assist trouble shooting

#3 filter UV did not operate correctly after changing sensors. Lamp intensity readings were incorrect. A CCT fault & ground fault alarms were also shown. All bulbs were checked, M2 was replaced. Unit was inspected for leaks & other ground fault issues. UV was brought back on line. Filter was returned to service.

Plant Upgrade

We continue conducting biweekly conference calls to discuss project.

Specifications for centrifuge and ozone generators were sent out for bidding.