

Poughkeepsies' Water Treatment Facility

MEMORANDUM

June 2, 2017

To: Joint Water Board
From: Randy J. Alstadt, P.E.
Water Plant Administrator
Subject: **May 2017 Status Report**

Water Quality/Production Issues

Process data for April 2017 and May 2017 are presented in the following tables. May Average Daily Flow was greater than April by 0.33 MGD. May 2017 demand was 0.70 MGD greater than May 2016. Quality was excellent. Plant effluent turbidity averaged 0.08 NTU while influent turbidity averaged 49 NTU (99.8% reduction).

Treatment Process Comparison April 2017 vs. May 2017

Parameter	April-17			May-17		
	Average	Maximum	Minimum	Average	Maximum	Minimum
Raw Flow, MGD	9.95	10.96	8.39	10.28	11.48	8.52
Raw Turbidity, NTU	81	285	18	49	158	11
Effluent Turbidity, NTU	0.07	0.13	0.03	0.08	0.16	0.06

Sludge Process Comparison April 2017 vs. May 2017

Parameter	April-17	May-17	Change	
			Quantity	Percent
Residual Solids, gallons	709,493	734,979	25,486	4%
Backwash, gallons	1,242,000	1,376,000	134,000	11%
Thickener, gallons	262,754	464,000	201,246	77%
Plate Settler, gallons	25,429	28,463	3,034	12%
Centrifuge #1 gallons	192,382	255,732	63,350	33%
Centrifuge #2 gallons	263,322	241,259	(22,063)	-8%
Centrifuge Total	455,704	496,991	41,287	9%
Centrifuge #1 gpm	18	16	(2)	-9%
Centrifuge #2 gpm	17	15	(2)	-14%
Solids Hauled, tons	294.07	386.51	92	31%

Plant Update

Plant operated well. The solids thickener had 2.5 feet of solids at the end of April (8.5 feet less than April). Centrifuge operating rate of 15.5 gpm.

Low Lift #2 Low

Staffing

Shane Hunt started May 8th as a replacement for Operator Paul West.

Upgrade

Low Lift Pump #2 repairs were completed and the pump was returned to service.
 Low Lift #3 was removed and returned for repairs.

Progress on the PaCl feed pumps are moving forward but not complete. This is not necessary for Ozone operation. This is part of work our staff is to perform.

Current Project Expenses/Budget are as follows.

Capital Budget Status		6/2/2017		Budget Split		Change Order Amount		Current budget		
Task	Contract Amount	Centrifuge	Ozone	Centrifuge	Ozone	Centrifuge	Ozone	Total	City Town Split	
									City (54.94%)	Town (45.06%)
CH2M Hill										
Engineer Centrifuge	\$ 368,000.00	\$ 368,000.00		\$ -		\$ 368,000.00	\$ -	\$ 368,000.00	\$ 202,179.20	\$ 165,820.80
Engineer Ozone	\$ 1,361,000.00		\$ 1,361,000.00		\$ 387,828.00	\$ -	\$ 1,748,828.00	\$ 1,748,828.00	\$ 960,806.10	\$ 788,021.90
SCADA Engineering	\$ 118,000.00		\$ 118,000.00	\$ -	\$ 24,789.00	\$ -	\$ 142,789.00	\$ 142,789.00	\$ 78,448.28	\$ 64,340.72
SCADA Components	\$ 80,000.00		\$ 80,000.00	\$ -	\$ (26,047.22)	\$ -	\$ 53,952.78	\$ 53,952.78	\$ 29,641.66	\$ 24,311.12
SCADA PLC Upgrade Engineering	\$ 382,000.00		\$ 382,000.00	\$ -		\$ -	\$ 382,000.00	\$ 382,000.00	\$ 209,870.80	\$ 172,129.20
SCADA PLC Construction (ESTIMATE)	\$ 318,000.00		\$ 318,000.00			\$ -	\$ 318,000.00	\$ 318,000.00	\$ 174,709.20	\$ 143,290.80
Liquid Oxygen System Air Products	\$ 9,000.00		\$ 9,000.00			\$ -	\$ 9,000.00	\$ 9,000.00	\$ 4,944.60	\$ 4,055.40
Eadoc Software	\$ 28,000.00		\$ 28,000.00		\$ (3,500.00)		\$ 24,500.00	\$ 24,500.00	\$ 13,460.30	\$ 11,039.70
Legal	\$ 60,000.00	\$ 7,800.00	\$ 52,200.00			\$ 7,800.00	\$ 52,200.00	\$ 60,000.00	\$ 32,964.00	\$ 27,036.00
Atlantic Testing	\$ 30,000.00		\$ (3,558.00)			\$ -	\$ 26,442.00	\$ 26,442.00	\$ 14,527.23	\$ 11,914.77
CITY Borrowing										
Cost of Issuances	\$ 85,112.00					\$ 42,556.00	\$ 42,556.00	\$ 85,112.00	\$ 85,112.00	\$ -
Bond Counsel	\$ 49,000.00					\$ 24,500.00	\$ 24,500.00	\$ 49,000.00	\$ 49,000.00	\$ -
FA	\$ 25,010.00					\$ 3,135.00	\$ 21,875.00	\$ 25,010.00	\$ 25,010.00	\$ -
Net Interest	\$ 34,356.92					\$ 5,712.10	\$ 28,644.82	\$ 34,356.92	\$ 34,356.92	\$ -
TOWN Borrowing										
Cost of Issuances										
Bond Counsel										
FA										
Net Interest										
Trailers	\$ 156,000.00	\$ 156,000.00				\$ 156,000.00	\$ -	\$ 156,000.00	\$ 85,706.40	\$ 70,293.60
Construction Contracts										
CO Falter	\$ 12,741,101.00	\$ 1,582,442.00	\$ 11,158,659.00	\$ 12,711.54	\$ 249,574.59	\$ 1,595,153.54	\$ 11,408,233.59	\$ 13,003,387.13	\$ 7,144,060.89	\$ 5,859,326.24
RLJ Electric	\$ 1,555,500.00	\$ 25,000.00	\$ 1,530,500.00	\$ 193,852.07	\$ 132,170.25	\$ 218,852.07	\$ 1,662,670.25	\$ 1,881,522.32	\$ 1,033,708.36	\$ 847,813.96
HT Lyons	\$ 373,000.00	\$ 20,000.00	\$ 353,000.00	\$ 21,211.00	\$ (1,500.00)	\$ 41,211.00	\$ 351,500.00	\$ 392,711.00	\$ 215,755.42	\$ 176,955.58
Plumbing (materials only)	\$ 78,000.00	\$ 6,300.00	\$ 71,700.00	\$ (6,300.00)	\$ (41,313.52)	\$ -	\$ 30,386.48	\$ 30,386.48	\$ 16,694.33	\$ 13,692.15
Total	\$ 17,851,079.92	\$ 2,165,542.00	\$ 15,458,501.00	\$ 221,474.61	\$ 722,001.10	\$ 2,462,919.71	\$ 16,328,077.92	\$ 18,790,997.63	\$ 10,410,955.70	\$ 8,380,041.93

Plumbing Contract amount is Low Bid. Actual costs were incurred by staff.
 Expect \$100,000 deduction from CO Falter