

Mattapoisett River Valley Water District Commission  
January 12, 2021

The Mattapoisett River Valley Water District Commission met on Tuesday, January 12, 2021 at 4:00 p.m. remotely using Zoom Meeting ID: 837 4025 0799 or by calling 1-646-876-9923.

In attendance:

Town of Fairhaven	Vincent Furtado	term expires: 5/2019
	Jeff Furtado	term expires: 5/2019
Town of Marion	Meghan Davis	term expires: 6/2021
	Randy Parker	term expires: 6/2021
Town of Mattapoisett	William Nicholson	term expires: 4/2020
	Henri Renauld	term expires: 4/2019
	Paul Silva	term expires: 4/2021
Town of Rochester	Rick Charon	term expires 4/2021
	Laurell J. Farinon	term expires: 4/2021
	Sandy Keese	term expires: 4/2021

Others in attendance:	Jon Gregory	Tata & Howard
	Paul Howard	Tata & Howard
	Blair Bailey	MRVWDC Counsel
	Mick Colageo	The Wanderer
	David Pierce	

Absent members included:	Mark Rees	term expires: 5/2019
	David Willett	term expires: 6/2021

Chairman Vincent Furtado called the meeting of the MRVWDC to order at 4:01p.m.

1. Acceptance of minutes of the November 10, 2020 and December 8, 2020 meeting  
Mr. Jeff Furtado motioned approval of the November 10, 2020 and December 8, 2020 meeting minutes, Mrs. Davis seconded, all in favor on a roll call vote. The motion passed in a roll call vote of 10 in favor, 0 opposed, 0 abstained (10-0-0).
2. Treasurer's Report  
Treasurer Davis reported that the monthly invoice schedule totaled \$150,278.32 which includes \$98,201.80 as well as separate invoices from Fall River Electrical (\$16,840.90) and Eversource (\$23,109.60), and \$6,239.60.

Invoices

Mattapoissett River Valley Water District  
Invoice Schedule Account #089-000-2992-0000

Analytical Balance	\$	25.00
Analytical Balance	\$	75.00
Analytical Balance	\$	25.00
Analytical Balance	\$	210.00
Verizon	\$	239.33
Blair Bailey	\$	150.00
Borden & Remington	\$	9,548.95
Sea Gas	\$	1,475.11
ECA HoldCo 1, LLC	\$	2,026.68
EverSource	\$	2,3044.17
Sure Lite Electric	\$	346.46
Verizon Wireless	\$	80.98
EverSource	\$	65.49
Tata & Howard	\$	1,842.73
Tata & Howard	\$	1,332.66
Tata & Howard	\$	3,064.21
Town of Mattapoissett	\$	44,994.73
USA Bluebook	\$	957.93
R.E. Erickson Co. Inc.	\$	854.52
W.B. Mason	\$	534.17
The Hope Group	\$	519.64
Controller Service & Sales	\$	6,789.04
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Total	\$	98,201.80
Fall River Electrical	\$	16,840.90
Verizon	\$	235.69

Treasurer Davis reported that the FY2021 budget is all set. Mr. Silva commented that it would be nice to capture the total of the original utility line project. Mr. Gregory and Mr. Howard looked it up during the meeting and the original approved amount was \$450,000. Mr. Nicholson motioned to accept the Treasurer's Report as presented and pay the above referenced invoices, Mr. Jeff Furtado seconded, all in favor. The motion passed in a roll call vote of 7 in favor, 0 opposed, 0 abstained (7-0-0). (Rochester representatives are not eligible to vote on financial matters.)

3. Koch Separation Systems Presentation and Question and Answer Session  
Chairman Vinnie Furtado introduced Melanie Blake and Jack Cogliano of Koch Separation Solutions, Inc. Ms. Blake made a Power Point Presentation (forwarded to MRVWDC in advance of the meeting) entitled Mattapoissett: Comparison of Targa II and Puron MP. Ms. Blake summarized that the existing Mattapoissett installation consists of 4 stages, each containing 45 Targa II cartridges with a recirculating design. The original design was for 6 MGD total production with a 5% bleed stream, for an overall recovery of 90%. The current average operating conditions are for a total production of 2.35 MGD (536 gpm per stage). While this improves membrane life by operating at a lower flux rate, it lowers the overall recovery to approximately 85%.

Ms. Blake summarized that areas of improvement include 1. the aging valves and instruments require an increasing amount of maintenance, 2. existing electrical controls have become obsolete, 3. upsets in the pretreatment can foul the membranes rapidly, resulting in loss of production and extra labor, and 4. Ms. Blake rising levels of iron and manganese in the feed water require increased cleaning frequency resulting in shorter membrane life.

Ms. Blake explained the Puron MP system and KSS UUF product positioning. Puron MP is a single header cartridge where fibers are potted at the top and sealed at the bottom. The cartridge is composed of reinforced fibers and PVDF membrane chemistry demonstrating high porosity and narrow pore size distribution in the UF range. The system has a high solids tolerance and can operate continuously at average solids as high as 100 mg/l. It can tolerate turbidity excursions up to 1000 NTU and can handle frequent clarifier upsets.

Puron MP benefits are that the fiber is very robust and is used in our submerged wastewater system, so that any upsets to the feed water will be dealt with easily. The Puron MP system introduces regular, fully automated, mini-CIPs. In most installations, this eliminates the need for full CIPs when there are no severe upsets.

The Puron MP Retrofit consists of 4 stages, each containing 62 Puron MP cartridges with a dead-end design. It is designed for 6 MGD total production with no bleed stream, for an overall recovery of 97%. The system can still be turned down as needed. It can reuse existing feed, backflush and CIP systems. It fits easily into existing footprint of a stage.

Ms. Blake share diagrams comparing general arrangements. The current plant annual operating cost is \$172,000 per year. The estimated Puron MP cost is \$154,000 per year. Ms. Blake presented that further opportunities include upgrade to the existing control panel, expanding the retrofit skid, and expanding the plant by adding additional stages.

Mr. Renauld discussed the unit using sodium hydroxide during CIP recovery cleaning. Discussion ensued about which states are presently using the new system. Ms. Blake responded that Texas was the only state doing a drinking water install; they are utilizing 4 stages of Targa and 2 of Puron MP. They are essentially running two systems at the same time, as the community wanted to retrofit in stages due to financial reasons. Mr. Gregory pointed out that we would have a similar situation, because we cannot get rid of the existing skids all at once. It would be several months where 2 systems were running concurrently.

Mr. Cogliano explained that the Targon cartridges will be discontinued this year and will not be a future option, therefore there will need to be a retrofit to Puron MP. They have a unit that they can bring down for a DEP pilot study. The unit is self-contained and has its own pumps and chemicals. They have a 2" hose line from feed process water to permeate and wash at 20 gallons per minute.

Discussion ensued about costs, and the remaining debt on the old system. Mr. Silva explained that the big savings comes in 2026.

Chairman Furtado stated we need to look at what it will cost five (5) years from now. We have never had to buy cartridges, and the district has put in valves themselves – it was basically a “limp along” program. The next steps will involve having all cost factors in place and doing a pilot program. There is not enough information yet to make an informed decision.

Discussion ensued about investigating long term costs and funding options. Mr. Jeff Furtado motioned that the MRVWDC move forward on initiating the Pilot program and investigating total costs, Mr. Silva seconded, all in favor on a roll call vote. The motion passed in a roll call vote of 10 in favor, 0 opposed, 0 abstained (10-0-0).

4. 2020 Annual Report

Mr. Gregory had forwarded the draft annual report of the MRVWDC in advance of the meeting. All agreed it was a job well done by Mr. Gregory. Mrs. Farinon motioned approval of the report as written, Mr. Vinnie Furtado seconded, all in favor on a roll call vote. The motion passed in a roll call vote of 10 in favor, 0 opposed, 0 abstained (10-0-0).

5. Operations Update

Mr. Renauld reported that the plant was running fairly well. Fairhaven repaired a leak in the well and purchased a spare VFD, as they always carry a spare. They did a new install on the pH probe, and it should last a few years at \$600 -\$650 per piece. They have to calibrate once a month per DEP standards. was absent and a report will be given at the next meeting.

6. Tata and Howard Report

It was reported that 686,806,000 gallons of finished water was produced through the MRV. Mr. Gregory reported that they are in the final stages of the Risk and Resilience report and will be wrapping up soon.

7. Old Business/New Business

Mr. Jeff Furtado reported that there was a leak by the Fairhaven well. Tata & Howard came down and did testing of raw water and removed iron and manganese. Pierce reminded members about the need for an annual report for both the MRVWDC and the MRVWSPAC. Mr. Gregory will prepare a report on behalf of the MRVWDC and Mrs. Farinon will prepare the report on behalf of the MRVWSPAC like she does every year.

Mr. Jeff Furtado motioned to adjourn the meeting at 5:32 p.m., Mr. Parker seconded, all in favor. The motion passed in a roll call vote of 10 in favor, 0 opposed, 0 abstained (10-0-0).