

PETITION WARRANT ARTICLES:

**FILTERING
MERRIMACK'S WATER**

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Lead Petitioner

February 25, 2019
MHS Little Theater

Overview

- By signature of 25+ registered voters, these two warrant articles were added to the MVD warrant
- The articles request funding to filter water from MVD wells 2&3 and 7&8, respectively. These wells are currently in operation.
- Filtration of MVD wells 4&5 is part of a settlement agreement between MVD and Saint Gobain Performance Plastics. Those wells are closed due to significant contamination.

Rationale for Filtration

- PFOA is a synthetic chemical within the class known as PFAS. PFAS is linked to serious health effects: cancers, thyroid disease, immune deficiencies, and more.
- PFAS are difficult to break down. They are persistent in nature and the body.
- All MVD wells are contaminated with PFOA from the use and discharge of this chemical by local industry.
- The amount of PFAS that would not cause adverse health effects is unknown, however states are lowering limits to as low as 10 ppt for drinking water.

PFOA in MVD Wells

DATE	Well 2	Well 3	Well 7	Well 8	7&8
11/20/18	12	25	19	16	17
10/25/18	16	22	22	17	20
9/19/18	17	19	27	23	25
8/23/18	14	24	26	22	25
7/19/18	8	18	20	18	19
6/22/18	13	20	21	18	17
5/29/18	10	23	28	20	21
4/19/18	7	13	19	16	18
3/22/19	8	12	23	18	20
2/15/19	8	14	22	16	20

Units in parts per trillion, ng/L Wells 4&5 are off-line

PFOA Standards

Fed/State	Limit	Note
EPA	70 (incl. PFOS)	Health advisory
NH	38*	MCL, proposed
NJ	14	MCL
VT	20 (incl. 4 PFAS)	MCL
NY	10	MCL, proposed
MN	35	Health advisory

Limits for PFAS are **lowering** as more becomes known about the risks they pose to health and the environment.

***NHDES is considering going lower with the proposed MCL**

Expected Benefits of Filtration

- Granulated Activated Carbon (GAC) is an efficient filter for organic chemicals:
 - PFOA levels would drop to $\sim < 2$ ppt
 - Other PFAS chemicals would be filtered
 - Any emerging organic contaminants would likely be filtered
- A municipal filtering system is professionally designed, monitored and maintained
- Private home & business filtration would not be needed to reach $\sim < 2$ ppt, but existing home systems would lower levels even more and would extend filter life

Article 2

- \$3,600,000 for the primary purpose of designing and constructing a water treatment system for wells 7&8 to filter PFAS
- Money would be bonded, likely over 20 years, utilizing the State Revolving Fund (SRF)
- \$86,000 to be added to 2019/2020 budget to cover first year's interest payment
- This does not preclude MVD from pursuing restitution from polluters

Article 3

- \$10,900,000 for the primary purpose of designing and constructing a water treatment system for wells 2&3 to filter PFAS, manganese and iron
- Money would be bonded, likely over 20 years, utilizing the State Revolving Fund (SRF)
- \$260,388.89 to be added to 2019/2020 budget to cover first year's interest payment
- This does not preclude MVD from pursuing restitution from polluters

Cost Impact

- Current average residential water bill: \$315
 - If Article 2 passes (wells 7&8)*: + 49 (16%)
 - If Article 3 passes (wells 2&3)*: +112 (36%)
 - TOTAL \$476 (51%)
- Comparative rates (Cost per 100 Cubic Feet)* :
 - MVD (current rate) \$1.95
 - MVD (if both articles pass) \$2.94**
 - Pennichuck Water Works \$3.30
 - Manchester Water Works \$1.51
 - Aquarion Water Company (seacoast area) \$4.54

* From MVD Rate Study, 1/2019

** Excludes other non-PFAS treatment rate increases

Personal Benefits

- Security in knowing water delivered by MVD is filtered from PFOA and other contaminants
- No need to pay for bottled water
- No need to purchase, monitor and maintain home treatment systems to lower PFOA levels
- Increased home values by having filtered water at the tap

Next Steps

- MVD Annual Meeting – JMUES APR, March 26 7 pm
- Amend each article with exact dollar amount for 2019 interest
- Each article requires 2/3 vote to pass

End of Presentation