City of Portsmouth
Department of Public Works

November 30, 2020

PORTSTMOUH WATER PFAS UPDATE

The City of Portsmouth's water system is testing for PFAS in all of our sources of supply quarterly in accordance with the NH drinking water quality rule for PFAS which was recently signed into law. This regulates drinking water testing, Maximum Contaminant Levels (MCLs), and compliance for four PFAS compounds: PFOA, PFOS, PFHxS and PFNA.

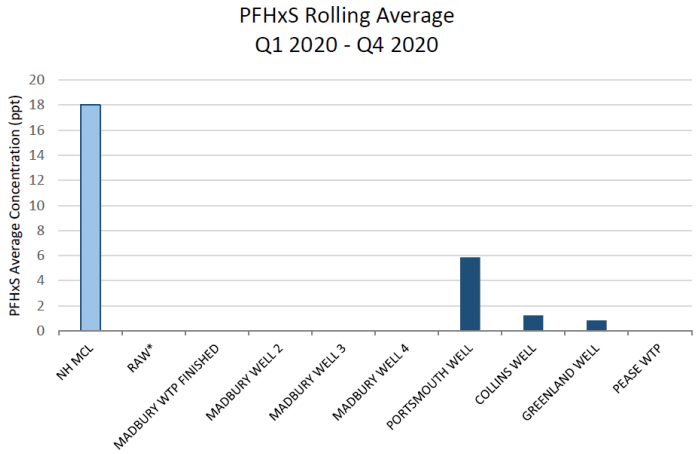
The following table provides a summary of the most recent Portsmouth water system testing results performed October 30, 2020.

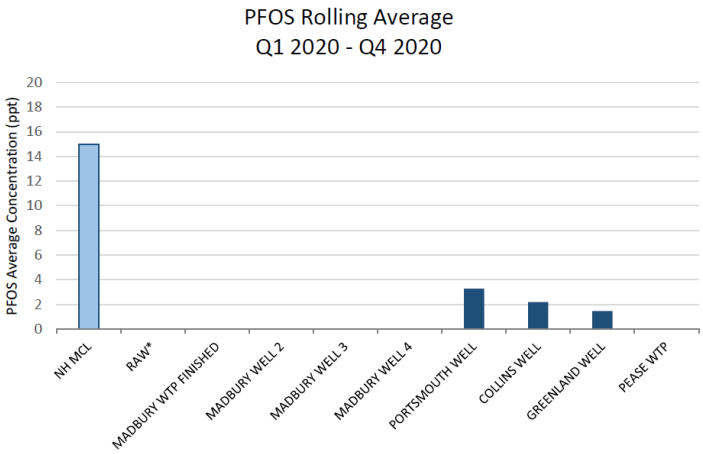
Additional results from samples collected since 2014 are accessible on https://www.cityofportsmouth.com/publicworks/water/portsmouth-water-system-pfas-update

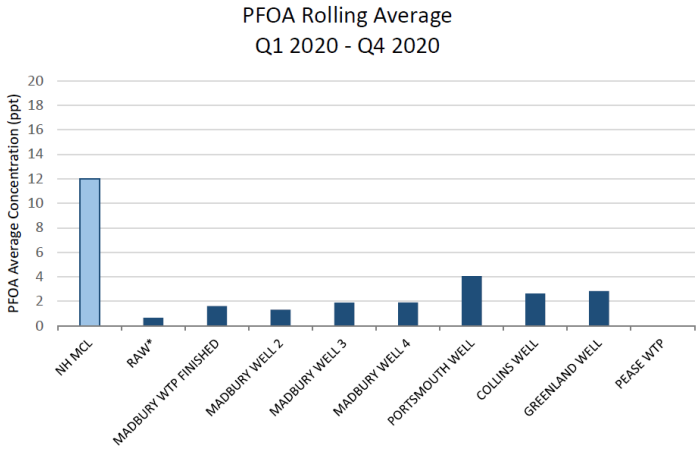
Currently all of Portsmouth Water's sources are in compliance with the New Hampshire MCLs.
PFAS Results from October 30, 2020 Samples (533 – EPA Approved Method)

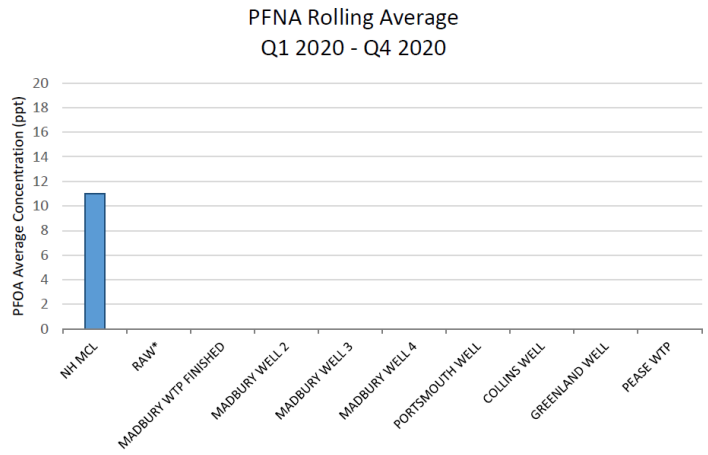
Sample Point	PFHxS	PFNA	PFOS	PFOA
NH MCL in Parts per Trillion (PPT)	**18**	**11**	**15**	**12**
Madbury Water Treatment	0.4	0.5	1.1	2.6
Madbury Well 2	0.7	ND	1.4	2.3
Madbury Well 3	0.9	ND	1.4	2.7
Madbury Well 4	0.6	ND	1.2	3.6
Collins Well	2.7	ND	4.2	3.2
Greenland Well	2.5	ND	4.4	3.8
Portsmouth Well	8.0	0.6	4.8	5.1

The following graphs illustrate the rolling average PFAS concentration of each water source relative to the regulatory standard Maximum Contaminant Level (MCL) as derived from the rolling annual average level.









Additional information can be accessed at:

www.cityofportsmouth.com/publicworks/water/pease-tradeport-water-system
or by calling Al Pratt, Water Resources Manager, at: 603-520-0622 or Brian Goetz, Deputy Director of Public Works at: 603-766-1420

PORTSMOUTH 2020-Q4 PFAS RESULTS
WATER SUPPLY – SOURCE WATER SAMPLES
SAMPLES COLLECTED: OCTOBER 30, 2020

ISOTOPE DILUTION METHOD (EPA METHOD 533)

PFAS	NHDES MCL Maximum Contaminant Level	BELLAMY RESERVOIR RAW WATER	MADBURY WTF TREATED WATER	MADBURY WELL 2	MADBURY WELL 3	MADBURY WELL 4	COLLINS WELL	GREENLAND WELL	PORTSMOUTH WELL #1	RDL	MDL
Perfluorobutanoic acid (PFBA)	no MCL	1.9 J	1.8 J	1.5 J	1.7 J	0.6 J	4.9	1.7 J	3.3	2.0	0.45
Perfluoro-3-Methoxypropanoic Acid (PFMPA)	no MCL									2.0	0.10
Perfluoropentanoic Acid (PFPeA)	no MCL		1.9 J	1.6 J	2.7	1.3 J	2.8	3.7	6.8	2.0	0.48
Perfluorobutanesulfonic acid (PFBS)	no MCL	1.1 J	1.1 J	1.7 J	1.7 J	2.1	18.2	2.7	2.9	2.0	0.21
Perfluoro-4-Methoxybutanoic Acid (PFMBA)	no MCL									2.0	0.21
Perfluoro[2-Ethoxyethane]Sulfonic Acid (PFEESA)	no MCL									2.0	0.21
Nonafluoro-3,6-Dioxaheptanoic Acid (NFDHA)	no MCL									2.0	0.23
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	no MCL									2.0	0.31
Perfluorohexanoic Acid (PFHxA)	no MCL	1.9 J	2.9	1.5 J	2.6	1.4 J	2.1	3.9	6.4	2.0	0.47
Perfluoropentanesulfonic acid (PFPeS)	no MCL								0.8 J	2.0	0.34
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid (HFPO-DA)	no MCL									2.0	0.17
Perfluoroheptanoic Acid (PFHpA)	no MCL	1.7 J	1.1 J	0.7 J	1.4 J	1.0 J	1.3 J	1.6 J	3.0	2.0	0.29
Perfluorohexanesulfonic acid (PFHxS)	18	0.5 J	0.4 J	0.7 J	0.9 J	0.6 J	2.7	2.5	8.0	2.0	0.17
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	no MCL									2.0	0.27
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	no MCL		1.9 J		1.3 J			0.9 J		2.0	0.47
Perfluorooctanoic Acid (PFOA)	12	2.6	2.6	2.3	2.7	3.6	3.2	3.8	5.1	2.0	0.25
Perfluoroheptanesulfonic acid (PFHpS)	no MCL									2.0	0.23
Perfluorononanoic Acid (PFNA)	11	0.5 J	0.5 J						0.6 J	2.0	0.33
Perfluorooctanesulfonic acid (PFOS)	15	1.6 J	1.1 J	1.4 J	1.4 J	1.2 J	4.2	4.4	4.8	2.0	0.91
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid(9Cl-PF3ONS)	no MCL									2.0	0.21
Perfluorodecanoic Acid (PFDA)	no MCL									2.0	0.37
Perfluoroundecanoic Acid (PFUnA)	no MCL									2.0	0.18
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	no MCL									2.0	0.19
Perfluorododecanoic Acid (PFDoA)	no MCL									2.0	0.30

Notes:
The EPA Approved Method 533 was used for compliance with the NHDES MCL Rules.

RDL = Reportable Detection Limit
MDL = Method Detection Limit
Blank cell = compound was not detected above the method detection limit (MDL)
Result above the RDL
J = Estimated concentration between the MDL and RDL