

Pease Tradeport Water Treatment System Update



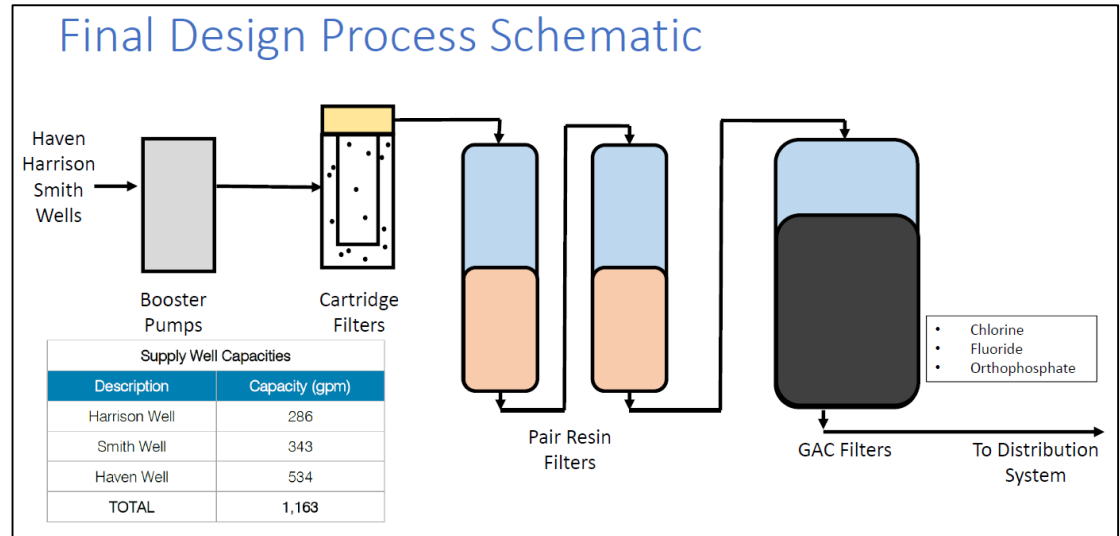
Pease Restoration Advisory Board
December 5, 2019

Grafton Road Well Treatment System:

Final Design and Treatment Components

Dual Filtration System:

- Resin Filters
- Activated Carbon Filters



Pease Water Treatment Facility - Construction In Progress:



New Carbon Filter Building - Delivery and Installation – October/November 2019

Construction Schedule:

Activity	Duration	Start	Finish	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21		
Bidding	61	11/15/2018	1/15/2019	█																																
Contract Award	56	1/15/2019	3/12/2019		█																															
Notice to Proceed	0	3/12/2019	3/12/2019					★																												
Submittals	181	3/13/2019	9/10/2019				█																													
Equipment Procurement	224	6/4/2019	1/14/2020								█																									
Phase 1 - Building Addition & GAC Filters	379	6/10/2019	6/23/2020								█																									
GAC Filters On-Line with Smith & Harrison	27	5/27/2020	6/23/2020																			█														
Phase 2 - Resin Skid, Cartridge Filters, Booster Pumps	279	5/29/2020	3/4/2021																			█														
Full System Start-Up with Smith & Harrison	48	1/15/2021	3/4/2021																																	
Phase 3 - Admin Area, Site Work, Haven Well Online	200	10/15/2020	5/3/2021																																	
Full System Start-Up with Haven	42	3/4/2021	4/15/2021																																	
Final Completion	4	4/29/2021	5/3/2021																																	★

Milestones:

- Spring 2019 – Begin Construction
- June 2020 – New GAC Filters (switchover of Harrison/Smith Wells)
- Spring 2021 – Startup with Resin/GAC filters (Harrison/Smith Wells)
- Summer 2021 – Haven Well Startup

Next Significant Milestone –
New GAC Filters

Demonstration Filter Carbon Changeout: November 2019



Water Supply and Quality Updates

www.cityofportsmouth.com/publicworks/water/pease-tradeport-water-system

City of
Portsmouth
Department of Public Works



October 28, 2019

PEASE TRADEPORT WATER SUPPLY UPDATE

The City's engineering consultant continues to sample the performance of the activated carbon filters based on the amount of water treated. With the newly adopted New Hampshire Maximum Contaminant Levels (MCLs) for PFOA, PFOS, PFHxS and PFNA in place we are now sampling at the recommended lab detection limit which goes down to 2 ppt. Per NHDES, any sample with "estimated numbers below the reporting limit are considered non-detects." Due to the loss of the Haven Well, in order to meet the Pease Tradeport Water System demand, water from the Portsmouth water system is boosted into the Pease system and blended with the treated water from the Harrison and Smith wells. The following table provides a summary of the most recent treatment system testing results. Comprehensive sample data since the filters were changed out in November 2018 is attached. Per NHDES rules, after October 1, 2019, we will begin to report the data as a 4-quarter rolling average.

PFAS Sampling for September 20, 2019

Sample Point	PFHxS	PFNA	PFOS	PFOA
NH MCLs (ppt)	18	11	15	12
Grafton Road Treatment	ND	ND	ND	ND

City of PORTSMOUTH NH | DEPARTMENT OF PUBLIC WORKS

WATER

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ANNOUNCEMENT: Snow Parking Ban has ended but be alert for a possible additional ban for the storm later today.

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PEASE TRADEPORT WATER SYSTEM

WATER QUALITY AND RESPONSE TO PFAS COMPOUNDS

For information about the Portsmouth Water System's PFAS sampling, click [here](#)

The City of Portsmouth's Water Division has been actively working with the United States Air Force (Air Force), the United States Environmental Protection Agency (EPA) and the New Hampshire Department of Environmental Services (NHDES) in response to the detection of elevated levels of the regulated

Well Type	Sample Location	Sample ID	Collection Date	6:2 Fluorotelomer sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonate (8:2 FTS)	N-Ethyl perfluorooctane sulfonamide (EFOSA)	N-Ethyl perfluorooctane sulfonamidoethanol (EFOSE)	N-Methyl perfluorooctane sulfonamide (MEFOSA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorobutanesulfonic acid (PFBS)	Perfluorobutanoic acid (PFBA)	Perfluorodecane sulfonate (PFDS)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDDA)	Perfluorohexane sulfonate (PFHxS)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctane sulfonamide (PFOSA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoic acid (PFOA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluoroundecanoic acid (PFUNA)	PFOS+PFOA		
																				0.07	0.07					0.07	
Production Well	Harrison Well	HARRISON-GW_20190917	17-Sep-19	ND	ND	ND	ND	ND	ND	ND	0.0093J	ND	ND	ND	0.0044J	0.013J	0.099	0.030	ND	ND	0.044	0.028	0.028	ND	ND	ND	0.072
	Smith Well	SMITH-GW_20190917	17-Sep-19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.025	0.0068J	ND	ND	0.010J	ND	0.0067J	ND	ND	ND	0.010J
	Collins Well	COLLINS-GW_20190917	17-Sep-19	ND	ND	ND	ND	ND	ND	0.016J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Portsmouth Well	PORTSMOUTH-GW_20190917	17-Sep-19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0047J	ND	ND	ND	ND	ND

October 1, 2019) reporting limit are

er supply wells in the consultant samples monitor for any PFAS line, the supply wells sampling data is posted engineering consultant.

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Parameters for Final System Operations

- Proposing additional piloting of Haven well water prior to 2021 startup of that well to better predict changeout frequency for resin/GAC filters

Thank You



Brian Goetz, Deputy Director of Public Works
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